RECUEIL DES PUBLICATIONS SCIENTIFIQUES DU CHU UCL NAMUR

N°3 - TROISIÈME QUADRIMESTRE 2018

Dinant • Godinne • Sainte-Elisabeth

CHU UCL NAMUR

RECUEIL DES PUBLICATIONS SCIENTIFIQUES DU CHU UCL NAMUR

N°3 - TROISIÈME QUADRIMESTRE 2018

Cher(e)s collègues,
Madame, Monsieur,

Ce troisième « Recueil trimestriel des publications 2018 du CHU UCL Namur » clôture l'année sur un score historique ! 203 publications « peer-reviewed » affiliées au CHU UCL Namur sont référencées et reprises dans les bases de données.

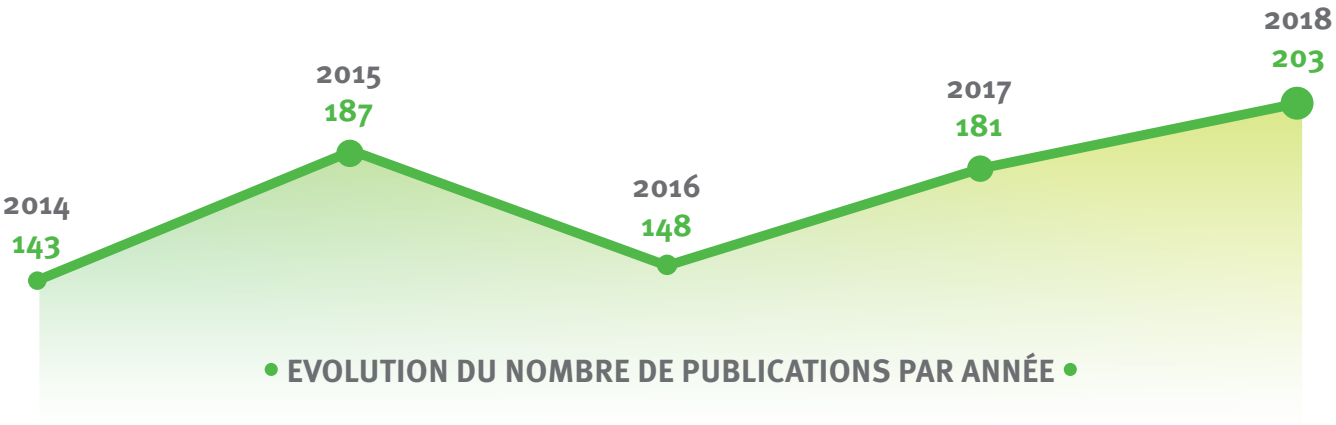
Une telle production ne peut être que le reflet de notre dynamisme en recherche clinique !
A côté des articles de recherche et de revue de la littérature publiés dans des journaux nationaux ou internationaux, il existe d'autres articles de vulgarisation qui, bien qu'absents des bases de données, ne sont pas moins importants car ils participent à la diffusion des connaissances et à l'information du grand public et des patients au sujet des innovations médicales et des nouveaux traitements.

Dans ce recueil de fin d'année, vous trouverez les publications des deux premiers trimestres qui nous sont parvenues après publications des recueils précédents et celles du troisième ainsi qu'une brève analyse.

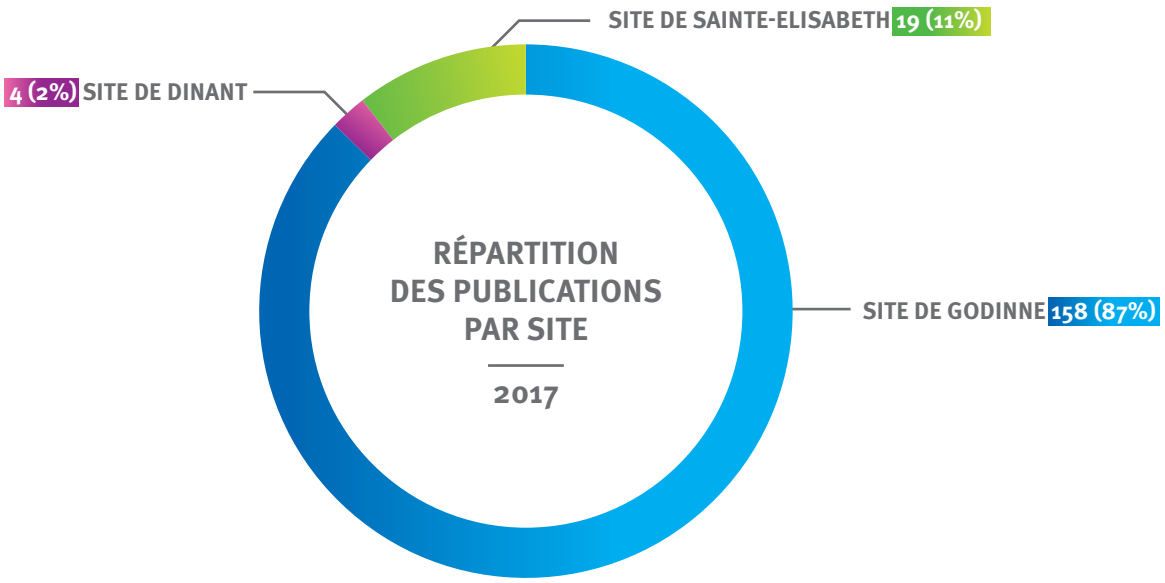
En vous exprimant nos meilleurs vœux pour l'année 2019,
nous vous souhaitons une bonne lecture.

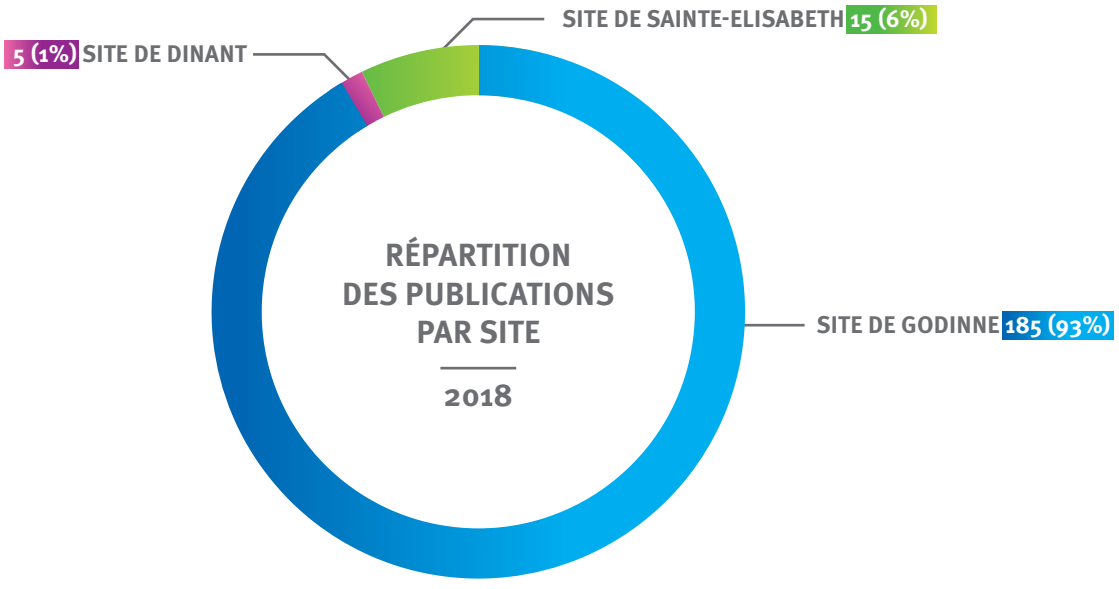
Professeur Maximilien Gourdin
Directeur aux Affaires Académiques
CHU UCL Namur

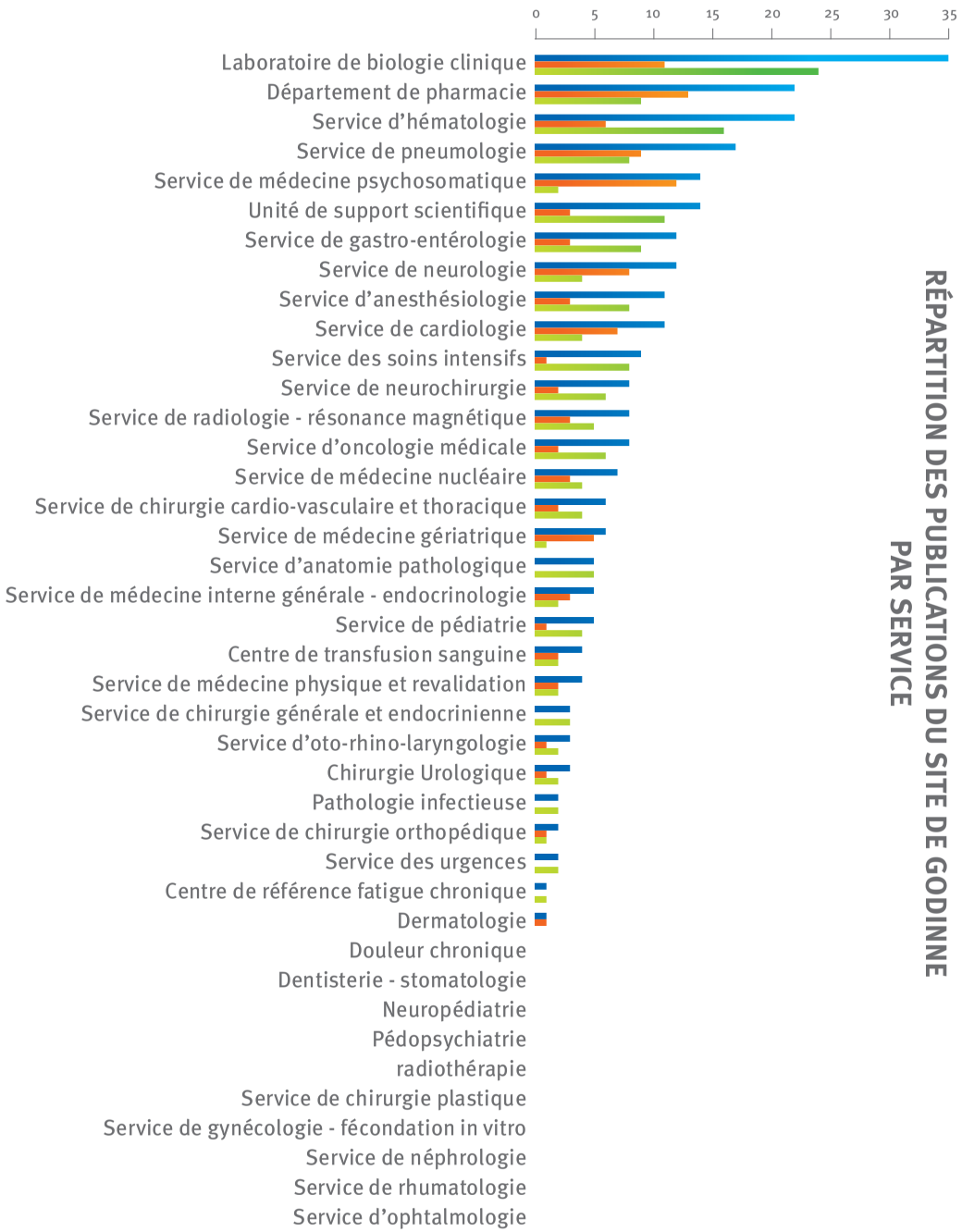
ANALYSE DE LA PRODUCTION LITTÉRAIRE SCIENTIFIQUE AU CHU UCL NAMUR

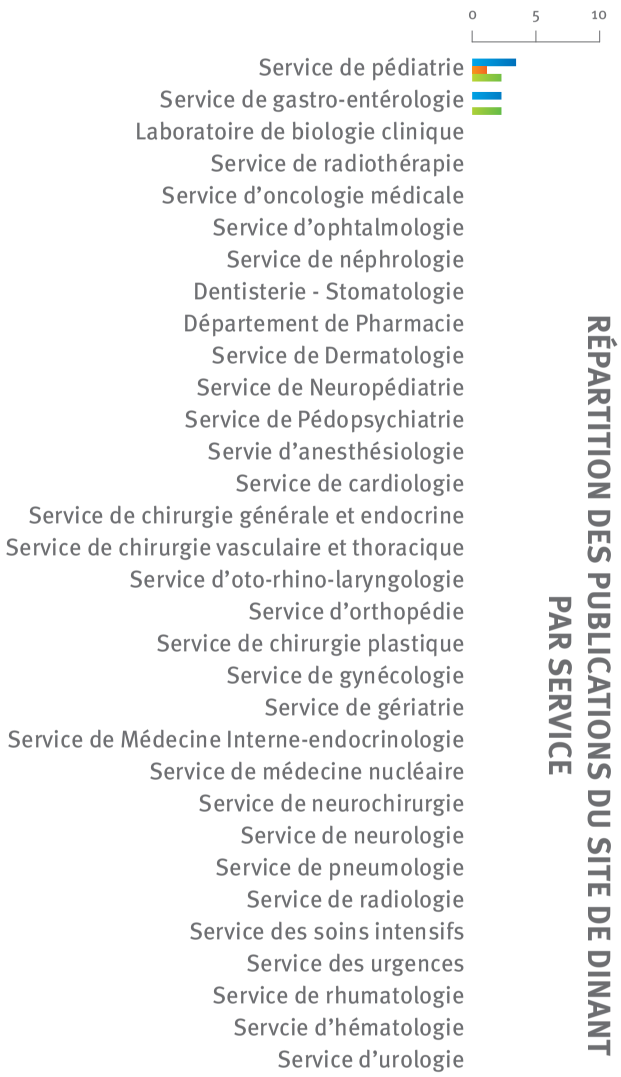


• EVOLUTION DU NOMBRE DE PUBLICATIONS PAR ANNÉE •

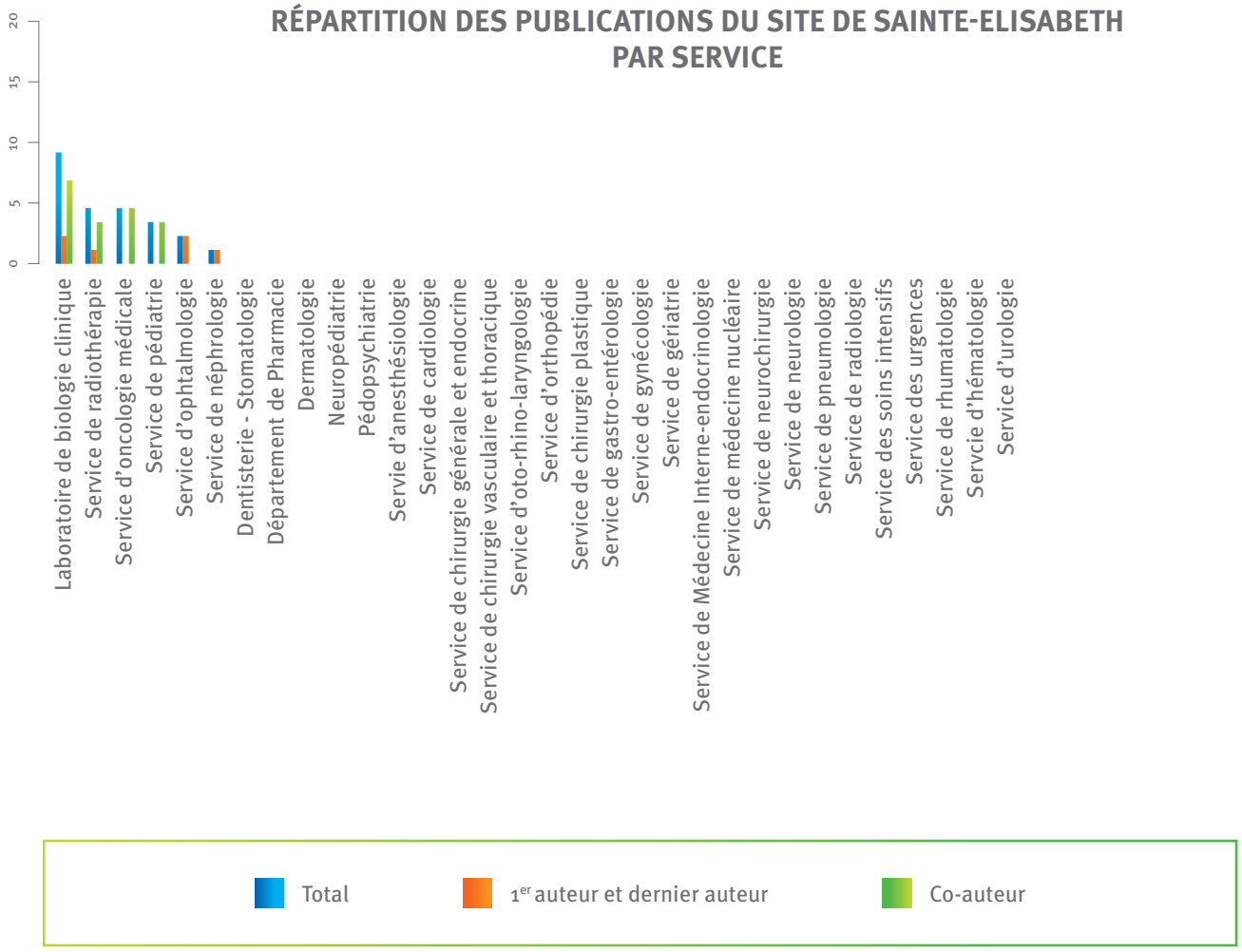





0
5
10
15
20
25
30
35
Laboratoire de biologie clinique
Département de pharmacie
Service d'hématologie
Service de pneumologie
Service de médecine psychosomatique
Unité de support scientifique
Service de gastro-entérologie
Service de neurologie
Service d'anesthésiologie
Service de cardiologie
Service des soins intensifs
Service de neurochirurgie
Service de radiologie - résonance magnétique
Service d'oncologie médicale
Service de médecine nucléaire
Service de chirurgie cardio-vasculaire et thoracique
Service de médecine gériatrique
Service d'anatomie pathologique
Service de médecine interne générale - endocrinologie
Service de pédiatrie
Centre de transfusion sanguine
Service de médecine physique et revalidation
Service de chirurgie générale et endocrinienne
Service d'oto-rhino-laryngologie
Chirurgie Urologique
Pathologie infectieuse
Service de chirurgie orthopédique
Service des urgences
Centre de référence fatigue chronique
Dermatologie
Douleur chronique
Dentisterie - stomatologie
Neuropédiatrie
Pédopsychiatrie
radiothérapie
Service de chirurgie plastique
Service de gynécologie - fécondation in vitro
Service de néphrologie
Service de rhumatologie
Service d'ophtalmologie
RÉPARTITION DES PUBLICATIONS DU SITE DE GODINNE
PAR SERVICE


0
5
10
Service de pédiatrie
Service de gastro-entérologie
Laboratoire de biologie clinique
Service de radiothérapie
Service d'oncologie médicale
Service d'ophtalmologie
Service de néphrologie
Dentisterie - Stomatologie
Département de Pharmacie
Service de Dermatologie
Service de Neuropédiatrie
Service de Pédopsychiatrie
Servie d'anesthésiologie
Service de cardiologie
Service de chirurgie générale et endocrine
Service de chirurgie vasculaire et thoracique
Service d'oto-rhino-laryngologie
Service d'orthopédie
Service de chirurgie plastique
Service de gynécologie
Service de gériatrie
Service de Médecine Interne-endocrinologie
Service de médecine nucléaire
Service de neurochirurgie
Service de neurologie
Service de pneumologie
Service de radiologie
Service des soins intensifs
Service des urgences
Service de rhumatologie
Servcie d'hématologie
Service d'urologie
RÉPARTITION DES PUBLICATIONS DU SITE DE DINANT
PAR SERVICE

RÉPARTITION DES PUBLICATIONS DU SITE DE SAINTE-ELISABETH PAR SERVICE



LA SIGNATURE SCIENTIFIQUE

La signature scientifique des articles et publications que vous rédigez et auxquels vous contribuez est d'une importance capitale pour le financement des missions de Recherche et d'Enseignement au sein du CHU UCL Namur et pour notre visibilité universitaire au niveau national et international.

Le nombre d'articles publiés par une Institution de Recherche et d'Enseignement ainsi que les facteurs d'impact des journaux qui les publient sont des critères importants utilisés pour le classement des Universités au niveau mondial.

Actuellement, l'Université catholique de Louvain est deuxième ou troisième université belge en fonction des classements (« The World University Ranking » , « QS Global World Ranking ») et première en Communauté Wallonie-Bruxelles.

Les « ranking » classent l'UCL comme une université avec un « Very High Research Output ». Nous contribuons à ce classement par la publication de nos articles.
Il est donc important d'identifier clairement les travaux scientifiques en accord avec les règles de l'Université et celles de notre institution.

En ce qui concerne la dénomination exacte de notre institution, on utilisera désormais obligatoirement « CHU UCL Namur », sachant qu'il faut toujours privilégier l'appellation « Université catholique de Louvain » avec un petit « c » avant de faire référence au CHU UCL Namur (sans tirets intermédiaires).

Affiliation correcte:

» Pour le site de Godinne
Université catholique de Louvain, CHU UCL Namur, Institut de Recherche XXX,
Service de ……., Av. Docteur G. Thérasse 1, B5530 Yvoir

» Pour le site de Sainte-Elisabeth
Université catholique de Louvain, CHU UCL Namur, Service de …….,
Place Louise Godin 15, B5000, Namur

» Pour le site de Dinant
Université catholique de Louvain, CHU UCL Namur, Service de …….,
rue Saint-Jacques, 501, B5500, Dinant

Dans le cas d'affiliations multiples
(p.ex. sur deux universités ou sur deux sites de l'université),
on se référera utilement à la section « Multi-affiliation »
sur http://www.uclouvain.be/242474.html

Pour tout renseignement complémentaire, vous pouvez vous adresser au secrétariat du Département « Recherche et Enseignement »
Tél. +32 (0)81 42 30 21 ou à l'adresse uss-chu@uclouvain.be.

ERRATUM
2018

BCR-ABL tyrosine kinase inhibitors: which mechanism(s) May explain the risk of thrombosis?

Haguet H, Douxfils J, **Chatelain C**, **Graux C**, **Mullier F**, Dogné J-M

Références	*Doi*	*IF*
TH Open 2018 ;2(2) :e68-e88		

Abstract

Imatinib, the first-in-class BCR-ABL tyrosine kinase inhibitor (TKI), had been a revolution for the treatment of chronic myeloid leukemia (CML) and had greatly enhanced patient survival. Second- (dasatinib, nilotinib, and bosutinib) and third-generation (ponatinib) TKIs have been developed to be effective against BCR-ABL mutations making imatinib less effective. However, these treatments have been associated with arterial occlusive events. This review gathers clinical data and experiments about the pathophysiology of these arterial occlusive events with BCR-ABL TKIs. Imatinib is associated with very low rates of thrombosis, suggesting a potentially protecting cardiovascular effect of this treatment in patients with BCR-ABL CML. This protective effect might be mediated by decreased platelet secretion and activation, decreased leukocyte recruitment, and anti-inflammatory or antifibrotic effects. Clinical data have guided mechanistic studies toward alteration of platelet functions and atherosclerosis development, which might be secondary to metabolism impairment. Dasatinib, nilotinib, and ponatinib affect endothelial cells and might induce atherogenesis through increased vascular permeability. Nilotinib also impairs platelet functions and induces hyperglycemia and dyslipidemia that might contribute to atherosclerosis development. Description of the pathophysiology of arterial thrombotic events is necessary to implement risk minimization strategies.

Mots-clefs

BCR-ABL ; arterial thrombotic events ; tyrosine kinase inhibitors ; chronic myeloid leukemia

Correction: Genetic Variants in PNPLA3 and TM6SF2 Predispose to the Development of Hepatocellular Carcinoma in Individuals With Alcohol-Related Cirrhosis.

Stickel F, Buch S, Nischalke HD, Weiss KH, Gotthardt D, Fischer J, Rosendahl J, **Marot A**, Elamly M, Casper M, Lammert F, McQuillin A, Zopf S, Spengler U, Marhenke S, Kirstein MM, Vogel A, Eyer F, von Felden J, Wege H, Buch T, Schafmayer C, Braun F, Deltenre P, Berg T, Morgan MY, Hampe J.

Références	*Doi*	*IF*
Am J Gastroenterol. 2018 Jul;113(7):1099.	*10.1038/s41395-018-0118-4*	*10,231*

Abstract

Author Pierre Deltenre, MD should appear in the author list in position 25, between Felix Braun and Thomas Berg. He should also have a PhD degree added to his name.

Erratum for

Genetic variants in PNPLA3 and TM6SF2 predispose to the development of hepatocellular carcinoma in individuals with alcohol-related cirrhosis. [Am J Gastroenterol. 2018]

Mots-clefs

Liver transplantation for alcoholic hepatitis: A systematic review with meta-analysis.

Marot A, Dubois M, Trépo E, Moreno C, Deltenre P.

Références	*Doi*	*IF*
PLoS One. 2018 Jan 11;13(1):e0190823.	*110.1371/journal.pone.0190823*	*2,766*

Abstract

BACKGROUND:
The rate of alcohol relapse among patients who underwent liver transplantation for alcoholic hepatitis (AH) is not precisely known.
AIM:
Synthesize the available evidence on liver transplantation for AH to assess alcohol relapse and 6-month survival.
METHODS:
Meta-analysis of trials evaluating liver transplantation for AH, either clinically severe or diagnosed on the explant.
RESULTS:
Eleven studies were included. The pooled estimate rate for alcohol relapse was 0.22 (95% CI = 0.12-0.36) in overall analysis with high heterogeneity between studies (I2 = 76%), 0.20 (95% CI = 0.07-0.43) in the subgroup analysis including patients with clinically severe AH (I2 = 84%), 0.14 (95% CI = 0.08-0.23) among patients with clinically severe AH in sensitivity analysis excluding the discrepant studies that did not use stringent selection criteria for liver transplantation (I2 = 0%), and 0.15 (95% CI = 0.07-0.27) for recurrent harmful alcohol consumption among patients with clinically severe AH (I2 = 3%). The risk of alcohol relapse was not different between AH transplanted patients and patients with alcoholic cirrhosis who underwent elective liver transplantation in sensitivity analysis excluding the discrepant studies (OR = 1.68, 95%CI = 0.79-3.58, p = 0.2, I2 = 16%). The pooled estimate rate for 6-month survival was 0.85 (95% CI = 0.77-0.91, I2 = 49%), and 0.80 among patients transplanted for clinically severe AH (95% CI = 0.69-0.88, I2 = 30%). AH transplanted patients had similar 6-month survival to patients with alcoholic cirrhosis who underwent elective liver transplantation (OR = 2.00, 95% CI = 0.95-4.23, p = 0.07, I2 = 0%).
CONCLUSION:
Using stringent selection criteria, 14% of patients with clinically severe AH have alcohol relapse after liver transplantation. The percentage of alcohol relapse of AH transplanted patients is similar than that of patients who underwent elective liver transplantation

Mots-clefs

Evaluation of the Bruker® MBT Sepsityper IVD module for the identification of polymicrobial blood cultures with MALDI-TOF MS.

Scohy A, **Noël A**, Boeras A, Brassinne L, **Laurent T**, Rodriguez-Villalobos H, Verroken A.

Références	*Doi*	*IF*
Eur J Clin Microbiol Infect Dis. 2018 Aug 20 [Epub ahead of print]	*10.1007/s10096-018-3351-2*	*2,537*

Abstract

Matrix-assisted laser desorption ionization time-of-flight mass spectrometry (MALDI-TOF MS) considerably reduces timeframe required from initial blood culture positivity towards complete bacterial identification. However, rapid identification of polymicrobial blood cultures remains challenging. We evaluated the performances of the Bruker® MBT Sepsityper IVD module on MALDI-TOF MS for the direct identification of polymicrobial blood culture bottles. This module has the ability to give a strong indication that a sample contains a mixture of organisms and to identify two of them. Blood culture bottles considered as polymicrobial using routine subculture were collected and processed using the Sepsityper kit. MALDI-TOF MS identification was performed using the MBT Compass IVD software including the Sepsityper module. From 143 polymicrobial blood culture bottles tested, 34.3% (49/143) were completely identified by the module. Both microorganisms were more easily detected by the module in samples containing two pathogens than in samples containing two contaminants (36.8% vs 29.4%). Additionally, in more than half of the samples, the module detected 1 of the different microorganisms contained in the same vial. In these cases, with a pathogen and contaminant in the same sample, the module detected the pathogen in more than 80%. The Sepsityper module identified 14 microorganisms which were not recovered by conventional culture methods. The Bruker® MBT Sepsityper IVD module contributed to a valuable identification of polymicrobial blood cultures in more than a third of all cases. Conventional culture methods are still required to complete the results and to carry on susceptibility testing.

Mots-clefs

Bacteremia; Direct identification; MALDI-TOF MS; Polymicrobial blood culture

L'animal de compagnie : un soutien médico-psychologique sous-estimé ?

Dransart C, Janne P, Gourdin M.

Références	*Doi*	*IF*
Ann Med Psychol (2018) In Press	*10.1016/j.amp.2018.08.0231*	

Abstract

Cet article, qui ne prétend pas constituer une revue exhaustive de la littérature, a pour but de (re)sensibiliser le lecteur aux bienfaits de l'animal de compagnie sur la santé médico-psychologique et sociale. Alors que les bienfaits physiques et locomoteurs d'avoir un animal de compagnie sont évidents, les autres relais, sociaux, cardiovasculaires, endocriniens et immunitaires sont, eux, moins bien connus. Chez les sujets avec ou sans pathologie cardiovasculaire, des liens ont été établis selon lesquels le fait d'être propriétaire d'un animal de compagnie a des effets sur l'hypertension, l'hyperlipidémie, l'activité physique, l'obésité, le système nerveux autonome, la réactivité cardiovasculaire et le taux de survie chez les sujets avec ou sans pathologie cardiovasculaire établie. Les relais par lesquels le bien-être physique est amélioré chez son propriétaire par l'animal sont essentiellement d'ordre cardiovasculaire, locomoteur et immunitaire. Le bien-être psychologique, lui, transite surtout par les relais sociaux. Il s'avère toutefois que la plupart des travaux sont essentiellement centrés sur des propriétaires de chiens, et qu'une lacune existe dans la littérature scientifique quant aux propriétaires de chats et de ce que l'on appelle les « NAC », à savoir les Nouveaux Animaux de Compagnie.

Mots-clefs

Applied Psychology ; Arts and Humanities (miscellaneous) ; Psychiatry and Mental health

Effect of ABCB1 genetic polymorphisms on the transport of rivaroxaban in HEK293 recombinant cell lines.

Sennesael AL, Panin N, Vancraeynest C, Pochet L, **Spinewine A,** Haufroid V, Elens L.

Références	*Doi*	*IF*
Sci Rep. 2018 Jul 12;8(1):10514	*10.1038/s41598-018-28622-4*	*4,122*

Abstract

Direct oral anticoagulants (DOAC) are substrates for the ABCB1 transporter (also called P-glycoprotein), an active efflux pump. ABCB1 polymorphisms have been previously reported to influence the pharmacokinetics of several drugs such as immunosuppressants and tyrosine kinase inhibitors. Recently, in vivo studies have suggested that genetic variants might contribute to the inter-individual variability in DOAC plasma concentrations. Therefore, we evaluated the in vitro effect of the most common coding ABCB1 single nucleotide polymorphisms (SNP), 1236 C›T-2677G›T-3435C›T, and the coding ABCB1 1199 G›A SNP on the transport activity towards rivaroxaban. HEK293 cells were transfected to overexpress the ABCB1 wild-type (1236C-2677G-3435C, 1199 G) or variant proteins (1236C-2677G-3435T, 1236T-2677T-3435T or 1199 A). ABCB1 expression decreased the intracellular accumulation of rivaroxaban, when compared to control cells. This confirms the involvement of ABCB1 in the active transport of rivaroxaban. However, the ABCB1 1236 C›T-2677G›T-3435C›T and 1199 G›A SNPs had no significant influence on the intracellular accumulation of rivaroxaban when compared to the wild-type protein. These results suggest that the ABCB1 coding SNPs investigated in the present study are unlikely to contribute to the inter-individual variability in rivaroxaban plasma concentrations.

Mots-clefs

adverse drug reactions; medication errors; oral anticoagulants; patient safety; qualitative research

Arterial hypertension in patients with atrial fibrillation in Europe: A report from the EURObservational Research Programme pilot survey on atrial fibrillation.

Dan GA, Badila E, Weiss E, Laroche C, Boriani G, Dan A, Tavazzi L, Maggioni AP, Crijns HJ, Popescu R, **Blommaert D**, Streb W, Lip GYH; EORP-AF General Pilot Registry Investigators.

Références	*Doi*	*IF*
Int J Cardiol. 2018 Mar 1;254:136-141	*10.1016/j.ijcard.2017.10.092*	*4,034*

Abstract

BACKGROUND:
Hypertension (HTN) is the most prevalent co-morbidity among atrial fibrillation (AF) patients; the relationship between the two is bidirectional, with an incremental effect on adverse outcomes.

PURPOSE:
To study clinical features, treatment patterns and 1year outcomes amongst AF patients with HTN in the EURObservational Research Programme Atrial Fibrillation (EORP-AF) Pilot Registry, a prospective multi-national survey conducted by the European Society of Cardiology in 9 European countries.

METHODS:
Of 3119 enrolled AF patients, 2194 were diagnosed with HTN (AF-HTN) and 909 were normotensive (AF-NT) (16 patients had unknown HTN status). We compared baseline clinical features, management strategy and 1-year outcomes in terms of all-cause death, cardiovascular (CV) death, and any thrombosis-related event (TE: stroke, transient ischemic attack, acute coronary syndrome, coronary intervention, cardiac arrest, peripheral/pulmonary embolism) in AF-HTN vs AF-NT patients.

RESULTS:
The AF-HTN patients had more prevalent CV risk factors and comorbidities (median CHA2DS2-VASc score (IQR) 4 (3, 5) in AF-HTN, versus 2 (1, 3) in AF-NT; p<0.01). Crude rate of all-cause death and any TE event was higher in AF-HTN (194 (11.2%) versus 60 (8.2%), p=0.02). Kaplan-Meier analysis curves for death by hypertensive status showed no significant differences between the subgroups (log rank test, p=0.22). On logistic regression analysis, HTN did not emerge as an independent risk factor for outcomes (OR 1.08, 95% CI 0.76-1.54).

CONCLUSION:
AF-HTN patients have a higher prevalence of comorbidities and this conferred a higher risk for a composite endpoint of all-cause death and thromboembolic events. In this cohort HTN did not independently predict all-cause mortality at 1-year.

Mots-clefs

Atrial fibrillation; Hypertension; Registry

Belgian guidelines for non-occupational HIV post-exposure prophylaxis 2017.

Libois A, Florence E, Derdelinckx I, Yombi JC, Henrard S, Uurlings F, Vandecasteele S, Allard SD, Demeester R, Van Wanzeele F, **Ausselet N**, De Wit S

Références	*Doi*	*IF*
Acta Clin Belg. 2018 Aug;73(4):275-280	*10.1080/17843286.2018.1428506*	*0,916*

Abstract

We present the updated Belgian guidelines for the use of non-occupational HIV post-exposure prophylaxis (NONOPEP). This document is inspired by UK guidelines 2015, adapted to the Belgian situation and approved by all AIDS reference centers in Belgium. When recommended, NONOPEP should be initiated as soon as possible, preferably within 24 h of exposure but can be offered up to 72 h. The duration of NONOPEP should be 28 days. These current guidelines include epidemiologic estimations, which can be used to calculate the risk of infection after a potential exposure and help to decide whether or not to start prophylaxis. We review which medications to use in the context of the last Belgian NONOPEP convention, provide a checklist for initial assessment, and make recommendations for monitoring individuals receiving NONOPEP.

Mots-clefs

HIV; post-exposure prophylaxis

Management of antiplatelet therapy in patients undergoing elective invasive procedures. Proposals from the French Working Group on perioperative haemostasis (GIHP) and the French Study Group on thrombosis and haemostasis (GFHT). In collaboration with the French Society for Anaesthesia and Intensive Care Medicine (SFAR).

Godier A, Fontana P, Motte S, Steib A, Bonhomme F, Schlumberger S, Lecompte T, Rosencher N, Susen S, Vincentelli A, Gruel Y, Albaladejo P, Collet JP; members of the French Working Group on perioperative haemostasis (GIHP). **Lessire S**, **Mullier F**.

Références	*Doi*	*IF*
Anaesth Crit Care Pain Med. 2018 Aug;37(4):379-389.	*10.1016/j.accpm.2017.12.012*	*2,2*

Abstract

The French Working Group on Perioperative Haemostasis (GIHP) and the French Study Group on Haemostasis and Thrombosis (GFHT) in collaboration with the French Society for Anaesthesia and Intensive Care Medicine (SFAR) drafted up-to-date proposals for the management of antiplatelet therapy in patients undergoing elective invasive procedures. The proposals were discussed and validated by a vote; all proposals but one could be assigned with a high strength. The management of antiplatelet therapy is based on their indication and the procedure. The risk of bleeding related to the procedure can be divided into high, moderate and low categories depending on the possibility of performing the procedure in patients receiving antiplatelet agents (none, monotherapy and dual antiplatelet therapy respectively). If discontinuation of antiplatelet therapy is indicated before the procedure, a last intake of aspirin, clopidogrel, ticagrelor and prasugrel 3, 5, 5 and 7 days before surgery respectively is proposed. The thrombotic risk associated with discontinuation should be assessed according to each specific indication of antiplatelet therapy and is higher for patients receiving dual therapy for coronary artery disease (with further refinements based on a few well-accepted items) than for those receiving monotherapy for cardiovascular prevention, for secondary stroke prevention or for lower extremity arterial disease. These proposals also address the issue of the potential role of platelet functional tests and consider management of antiplatelet therapy for regional anaesthesia, including central neuraxial anaesthesia and peripheral nerve blocks, and for coronary artery surgery.

Mots-clefs

Antiplatelet agents; Bleeding; Regional anaesthesia; Surgery; Thrombosis

Effect of neuro-orthopaedic surgery for spastic equinovarus foot after stroke. A prospective longitudinal study based on a goal-centered approach.

Deltombe T, Gilliaux M, Peret F, Leeuwerck M, Wautier D, Hanson P, Gustin T.

Références	*Doi*	*IF*
Eur J Phys Rehabil Med. 2018 Jun 14. [Epub ahead of print]	*10.23736/S1973-9087.18.04993-6*	*2,208*

Abstract

BACKGROUND:
Neuro-orthopaedic surgery is recognized as an effective treatment to improve walking capacity in case of spastic equinovarus foot. However, the effect of surgery on the 3 domains of the International Classification of Functioning, Disability and Health (ICF) has never been studied.

AIM:
To assess the efficacy of the neuro-orthopaedic surgery for spastic equinovarus foot after stroke based on a goal-centered approach and on the 3 domains of the International Classification of Functioning, Disability and Health (ICF).

DESIGN:
Prospective, single blind, case-series, intervention study (before-after trial) with a 1-year follow-up.

POPULATION:
Eighteen hemiplegic patients with spastic equinovarus foot.

METHODS:
A selective tibial neurotomy and/or an Achille tendon lengthening and/or a tibialis anterior tendon transfer were performed to correct a disabling SEF. The primary outcome measure was the goal attainment scale. The secondary outcome measures included body function and structure (spasticity, strength, range of motion, pain, gait speed, ankle kinematics), activities (walking aids, functional ambulation category, functional walking category, ABILOCO) and social participation and quality of life (Satispart-Stroke, SF-36) assessment before and 2 months and 1 year after surgery.

RESULTS:
An increase in the goal attainment scale score, in the body function and activity/participation domains of the ICF, a decrease in triceps spasticity and pain, an increase in ankle range of motion and gait speed, an improvement in equinus and a reduction in walking aids were observed.

CONCLUSIONS:
This study confirms the efficacy of the neuro-orthopaedic surgical treatment of spastic equinovarus foot after stroke to improve walking capacities and to achieve personal goals in the body function and activity/participation domains of the ICF.

Mots-clefs

RECUEIL DES PUBLICATIONS SCIENTIFIQUES DU CHU UCL NAMUR

N°3 - TROISÈME QUADRIMESTRE 2018

SEPTEMBRE

Vulnerability of caregivers of people with a neurodegenerative disease: a synthesis.

Robaye L, Mormont E, Lassaux A, Janne P, Gourdin M

Références	*Doi*	*IF*
Geriatr Psychol Neuropsychiatr Vieil. 2018;16(3):298-304	*10.1684/pnv.2018.0747*	*0,59*

Abstract

The aging of the population and the increasing of the neurodegenerative pathologies encourage the current policies in health to further promote the home maintenance for dependent elderly people. Therefore, informal caregivers provide a substantial assistance to the medical team by monitoring home care. These volunteer caregivers who play an essential role in the survival of our health system however may expose to dangers of systematic assistance. In order to better understand the plural risks which caregivers are likely to face, this paper proposes a critical analysis of the consequences of caregiving on health and quality of life and summarizes factors that contribute to vulnerability - protection of caregivers. It seems caregivers will present very heterogeneous reactions in the way they are considering the care situation. Facing to many difficulties encountered, caregivers are dealing with their skills and adopt personal coping strategies. There is thus a wide range of fragility profiles and needs among caregivers. Better taking into account the multiple components of aid relationships paves the way toward possible new care perspectives by recognizing the specific needs of each caregiver with respect for its uniqueness. In this way only, we can effectively contribute to challenge one of the important and actual social issue: the prevention of global exhaustion of caregivers of people with neurodegenerative disease.

Mots-clefs

Aging; family caregivers; informal caregivers; neurodegenerative disease; role; vulnerability

2

Rituximab plus Lenalidomide in Advanced Untreated Follicular Lymphoma.

Morschhauser F, Fowler NH, Feugier P, Bouabdallah R, Tilly H, Palomba ML, Fruchart C, Libby EN, Casasnovas RO, Flinn IW, Haioun C, Maisonneuve H, Ysebaert L, Bartlett NL, Bouabdallah K, Brice P, Ribrag V, Daguindau N, Le Gouill S, Pica GM, Martin Garcia-Sancho A, López-Guillermo A, Larouche JF, Ando K, Gomes da Silva M, **André M**, Zachée P, Sehn LH, Tobinai K, Cartron G, Liu D, Wang J, Xerri L, Salles GA; RELEVANCE Trial Investigators.

Références	*Doi*	*IF*
N Engl J Med. 2018;379(10):934-947	*10.1056/NEJMoa1805104*	*79,258*

Abstract

BACKGROUND:
Rituximab plus chemotherapy has been shown to be effective in patients with advanced-stage, previously untreated follicular lymphoma; nevertheless, most patients will have a relapse. Combination immunotherapy with lenalidomide and rituximab is an immunomodulatory regimen that has shown promising activity in patients with indolent B-cell non-Hodgkin's lymphoma.

METHODS:
We conducted this multicenter, international, phase 3 superiority trial to evaluate rituximab plus lenalidomide, as compared with rituximab plus chemotherapy, in patients with previously untreated follicular lymphoma. Patients were randomly assigned to receive one of the two regimens, followed by maintenance monotherapy with rituximab. Treatment with rituximab plus lenalidomide consisted of 18 cycles of the two drugs, followed by rituximab maintenance therapy every 8 weeks for 12 cycles (six additional doses). Treatment with rituximab plus chemotherapy consisted of the investigator's choice of one of three rituximab-based regimens, followed by maintenance monotherapy with rituximab every 8 weeks for 12 cycles. The primary end points were complete response (confirmed or unconfirmed) at 120 weeks and progression-free survival.

RESULTS:
A total of 1030 patients were randomly assigned to receive rituximab plus lenalidomide (513 patients) or rituximab plus chemotherapy (517 patients). The rate of confirmed or unconfirmed complete response at 120 weeks was similar in the two groups: 48% (95% confidence interval [CI], 44 to 53) in the rituximab-lenalidomide group and 53% (95% CI, 49 to 57) in the rituximab-chemotherapy group (P=0.13). The interim 3-year rate of progression-free survival was 77% (95% CI, 72 to 80) and 78% (95% CI, 74 to 82), respectively. A higher percentage of patients in the rituximab-chemotherapy group had grade 3 or 4 neutropenia (32% vs. 50%) and febrile neutropenia of any grade (2% vs. 7%), and a higher percentage of patients in the rituximab-lenalidomide group had grade 3 or 4 cutaneous reactions (7% vs. 1%).

CONCLUSIONS:
Among patients with previously untreated follicular lymphoma, efficacy results were similar with rituximab plus lenalidomide and rituximab plus chemotherapy (with both regimens followed by rituximab maintenance therapy). The safety profile differed in the two groups. (Funded by Celgene; RELEVANCE ClinicalTrials.gov numbers, NCT01476787 and NCT01650701 , and EudraCT number, 2011-002792-42)

Mots-clefs
Alzheimer's disease; MSmetrix; biomarkers; magnetic resonance image; volumetry

Acute idiopathic eosinophilic pneumonia in a teenager

Blavier N, Thimmesch M, Lebrun F, **Bodart E**.

Références	*Doi*	*IF*
Rev Med Liege. 2018;73(9):439-441.		*0,38*

Abstract
Acute idiopathic eosinophilic pneumonia is a very rare cause of interstitial lung disease in children. Pathophysiological mechanisms and etiology remain poorly understood. It manifests as a febrile dyspnea, progressively worsening. Chest X-ray, performed as first-line, shows bilateral infiltrates. The chest CT confirms a diffuse infiltrative pneumopathy and the bronchoalveolar lavage demonstrates the presence of alveolar hypereosinophilia. The exclusion of other causes of alveolar eosinophilia confirms the diagnosis. A ventilatory support is very often necessary. Systemic corticosteroids provides a spectacular clinical improvement, without recurrence.

Mots-clefs
Acute idiopathic eosinophilic pneumonia ; Diffuse infiltrative lung disease

Rapid detection and discrimination of chromosome -and MCR-plasmid-mediated resistance to polymyxins by MALDI-TOF MS in Escherichia coli: the MALDIxin test.

Dortet L, Bonnin RA, Pennisi I, Gauthier L, Jousset AB, Dabos L, Furniss RCD, Mavridou DAI, **Bogaerts P, Glupczynski Y,** Potron A, Plesiat P, Beyrouthy R, Robin F, Bonnet R, Naas T, Filloux A, Larrouy-Maumus G.

Références	*Doi*	*IF*
J Antimicrob Chemother. 2018 Sep 1. [Epub ahead of print]	*10.1093/jac/dky330*	*5,217*

Abstract

BACKGROUND:
Polymyxins are currently considered a last-resort treatment for infections caused by MDR Gram-negative bacteria. Recently, the emergence of carbapenemase-producing Enterobacteriaceae has accelerated the use of polymyxins in the clinic, resulting in an increase in polymyxin-resistant bacteria. Polymyxin resistance arises through modification of lipid A, such as the addition of phosphoethanolamine (pETN). The underlying mechanisms involve numerous chromosome-encoded genes or, more worryingly, a plasmid-encoded pETN transferase named MCR. Currently, detection of polymyxin resistance is difficult and time consuming.
OBJECTIVES:
To develop a rapid diagnostic test that can identify polymyxin resistance and at the same time differentiate between chromosome- and plasmid-encoded resistances.
Methods:
We developed a MALDI-TOF MS-based method, named the MALDIxin test, which allows the detection of polymyxin resistance-related modifications to lipid A (i.e. pETN addition), on intact bacteria, in <15 min.
RESULTS:
Using a characterized collection of polymyxin-susceptible and -resistant Escherichia coli, we demonstrated that our method is able to identify polymyxin-resistant isolates in 15 min whilst simultaneously discriminating between chromosome- and plasmid-encoded resistance. We validated the MALDIxin test on different media, using fresh and aged colonies and show that it successfully detects all MCR-1 producers in a blindly analysed set of carbapenemase-producing E. coli strains.
CONCLUSIONS:
The MALDIxin test is an accurate, rapid, cost-effective and scalable method that represents a major advance in the diagnosis of polymyxin resistance by directly assessing lipid A modifications in intact bacteria.

Mots-clefs

Dysplasia; Hypoplasia; Spondylolisthesis; Spondylolysis; Vertebral body

Primary central nervous system lymphoma revealed by multiple intraventricular mass lesions.

Philippart M, Mulquin N, Gustin T, Fervaille C, London F.

Références	*Doi*	*IF*
Acta Neurol Belg. 2018 Sep 3. [Epub ahead of print]	*10.1007/s13760-018-1017-6*	*2,072*

Abstract

Mots-clefs
Intraventricular mass lesions. CNS lymphoma. MRI

Diagnosis and management of PNH: review and recommendations from a Belgian expert panel.

Devos T, Meers S, Boeckx N, Gothot A, Deeren D, **Chatelain B, Chatelain C, Devalet B.**

Références	*Doi*	*IF*
Eur J Haematol. 2018 Sep 1. [Epub ahead of print]	*10.1111/ejh.13166*	*2,595*

Abstract

Despite its considerable morbidity and mortality, paroxysmal nocturnal haemoglobinuria (PNH) is still underdiagnosed. Patients with PNH can suffer from cardiovascular, gastro-intestinal, neurological or haematological symptoms and refer to several specialists. The aim of this paper is to review the diagnosis and the management of PNH patients, with the primary focus on identifying high-risk groups. Additionally, the implementation and prognostic value of the defined high-risk groups will be commented on and the management of PNH patients is discussed from a Belgian perspective. Finally, based on the available data, recommendations are provided. Eculizumab is a potent C5 complement inhibitor and reduces intravascular haemolysis and thrombosis in PNH patients and improves their quality of life. As thrombosis is the main cause of death in PNH patients, identifying high-risk PNH patients in need of therapy is essential. Currently, novel complement inhibitors are in development and the first data seem promising. Another challenge in PNH is to identify new markers to assess the thrombotic risk to achieve a better risk-based prophylactic anti-thrombotic management. Finally, because of the low prevalence of the disease, PNH patients should be included in the prospective PNH registry, which will offer new insights on the natural course of the disease and the impact of treatment of PNH. This article is protected by copyright. All rights reserved.

Mots-clefs

eculizumab; flow cytometry; haematopoietic stem cell transplantation; haemolysis; paroxysmal nocturnal haemoglobinuria; registry; thrombosis

Minimal residual disease negativity using deep sequencing is a major prognostic factor in multiple myeloma.

Perrot A, Lauwers-Cances V, Corre J, Robillard N, Hulin C, Chretien ML, Dejoie T, Maheo S, Stoppa AM, Pegourie B, Karlin L, Garderet L, Arnulf B, **Doyen C**, Meuleman N, Royer B, Eveillard JR, Benboubker L, Dib M, Decaux O, Jaccard A, Belhadj K, Brechignac S, Kolb B, Fohrer C, Mohty M, Macro M, Richardson PG, Carlton V, Moorhead M, Willis T, Faham M, Anderson KC, Harousseau JL, Leleu X, Facon T, Moreau P, Attal M, Avet-Loiseau H, Munshi N.

Références	*Doi*	*IF*
Blood. 2018 Sep 24. [Epub ahead of print]	*10.1182/blood-2018-06-858613*	*15,132*

Abstract

The introduction of novel agents has led to major improvements in clinical outcomes for patients with multiple myeloma. In order to shorten evaluation times for new treatments, health agencies are currently examining minimal residual disease (MRD) as a surrogate endpoint in clinical trials. We assessed the prognostic value of MRD, measured during maintenance therapy by next-generation sequencing. MRD negativity was defined as the absence of tumor plasma cell within 1,000,000 bone marrow cells (<10-6). Data were analyzed from a recent clinical trial that evaluated the role of transplantation in newly diagnosed myeloma patients treated with lenalidomide, bortezomib, and dexamethasone (RVD). MRD negativity was achieved at least once during maintenance in 127 patients (25%). At the start of maintenance therapy, MRD was a strong prognostic factor for both progression-free survival (adjusted hazard ratio, 0.22; 95% confidence interval, 0.15 to 0.34; P<0.001) and overall survival (adjusted hazard ratio, 0.24; 95%confidence interval, 0.11 to 0.54; P=0.001). Patients who were MRD negative had a higher probability of prolonged progression-free survival than patients with detectable residual disease, regardless of treatment group (RVD versus transplant), cytogenetic risk profile or international staging system disease stage at diagnosis. These results were similar after completion of maintenance therapy. Our findings confirm the value of MRD status, as determined by next-generation sequencing, as a prognostic biomarker in multiple myeloma, and suggest that this approach could be used to adapt treatment strategies in future clinical trials.

Mots-clefs

8

Towards microstructure fingerprinting: Estimation of tissue properties from a dictionary of Monte Carlo diffusion MRI simulations.

Rensonnet G, Scherrer B, Girard G, **Jankovski A**, Warfield SK, Macq B, Thiran JP, Taquet M.

Références	*Doi*	*IF*
Neuroimage. 2018;184:964-980.	*10.1016/j.neuroimage.2018.09.076*	*5,426*

Abstract

Many closed-form analytical models have been proposed to relate the diffusion-weighted magnetic resonance imaging (DW-MRI) signal to microstructural features of white matter tissues. These models generally make assumptions about the tissue and the diffusion processes which often depart from the biophysical reality, limiting their reliability and interpretability in practice. Monte Carlo simulations of the random walk of water molecules are widely recognized to provide near groundtruth for DW-MRI signals. However, they have mostly been limited to the validation of simpler models rather than used for the estimation of microstructural properties. This work proposes a general framework which leverages Monte Carlo simulations for the estimation of physically interpretable microstructural parameters, both in single and in crossing fascicles of axons. Monte Carlo simulations of DW-MRI signals, or fingerprints, are pre-computed for a large collection of microstructural configurations. At every voxel, the microstructural parameters are estimated by optimizing a sparse combination of these fingerprints. Extensive synthetic experiments showed that our approach achieves accurate and robust estimates in the presence of noise and uncertainties over fixed or input parameters. In an in vivo rat model of spinal cord injury, our approach provided microstructural parameters that showed better correspondence with histology than five closed-form models of the diffusion signal: MMWMD, NODDI, DIAMOND, WMTI and MAPL. On whole-brain in vivo data from the human connectome project (HCP), our method exhibited spatial distributions of apparent axonal radius and axonal density indices in keeping with ex vivo studies. This work paves the way for microstructure fingerprinting with Monte Carlo simulations used directly at the modeling stage and not only as a validation tool.

Mots-clefs

Diffusion-weighted magnetic resonance imaging; Microstructure fingerprinting; Monte Carlo simulations; Sparse optimization; Tissue microstructure

T2-weighted magnetic resonance imaging characterization of prolactinomas and association with their response to dopamine agonists.

Burlacu MC, Maiter D, Duprez T, **Delgrange E**

Références	*Doi*	*IF*
Endocrine. 2018 Sep 28. [Epub ahead of print]	*10.1007/s12020-018-1765-3*	*3,179*

Abstract

PURPOSE:
Recent work supports the use of T2-weighted MRI intensity as a tool for treatment stratification in acromegaly. Our study aimed to establish if the pattern of T2 intensity could be a predictor of hormonal and/or tumoral response to dopamine agonists (DAs) in prolactinomas.

METHODS:
This was a retrospective study performed in two academic centers. We characterized the magnetic resonance T2-weighted aspect of prolactinomas (signal intensity and homogeneity in the whole tumors) before DA therapy and correlated this pattern to the prolactin (PRL) concentration at diagnosis and to hormonal and tumoral responses after 1 year of medical treatment. We separately analyzed a subgroup of prolactinomas visually very bright in more than 50% of the surface («cystic» tumors).

RESULTS:
Out of 70 prolactinomas, 80% were T2 hyperintense and 40% were heterogeneous. At diagnosis, heterogeneous prolactinomas were more frequent in men (68% vs. 28.9%, $p \leq 0.011$), larger (median area 304.5 mm2 vs. 56.5 mm2, $p \leq 0.021$), taller (mean height 18.6 mm vs. 9.9 mm, $p < 0.001$), more secreting (median PRL ULN_area 23 µg/L/cm2 vs. 12.6 µg/L/cm2, $p \leq 0.032$) and had poorer hormonal response to DA as compared with homogeneous prolactinomas. «Cystic» tumors were diagnosed almost exclusively in women and secreted less prolactin, but showed similar hormonal and tumoral response as «non-cystic» tumors. In homogeneous prolactinomas, the T2-weighted intensity ratio was correlated to prolactin secretion, although not significantly, and did not predict hormonal and tumoral response to DA.

CONCLUSIONS:
Our study confirms that hypo/isointense prolactinoma is a rare finding and suggests for the first time that the heterogeneity of prolactinoma T2 signal at diagnosis might be correlated with a different clinical behavior and could be used as a negative predictor factor of hormonal response to DA.

Mots-clefs

Dopamine agonists; MRI; Prolactinoma; Therapy

Inhaled triple therapy in chronic obstructive pulmonary disease.

Marchand E.

Références	*Doi*	*IF*
Lancet. 2018;392(10153):1112	*10.1016/S0140-6736(18)31790-2.*	*53,254*

Abstract

In the TRIBUTE study, Alberto Papi and colleagues (March 17, p 1076) reported a small but significant reduction of the exacerbation rate with the addition of an inhaled corticosteroid to dual long-acting bronchodilation in patients with chronic obstructive pulmonary disease and severe or very severe airway obstruction with at least one exacerbation in the previous year. Data derived from the ISOLDE study2 showed that abruptly stopping treatment with inhaled corticosteroid was associated with an increased risk of exacerbation in about 25% of patients, with a median delay of 20 days. This result contrasts with data showing that progressive weaning of inhaled corticosteroid is not associated with an increased rate of exacerbation in patients treated with dual bronchodilation, at least in those with blood eosinophils below 2% of total white blood cell count.

The run-in period of the TRIBUTE study was only 2 weeks and was associated with an abrupt weaning of inhaled corticosteroid in about two thirds of patients.1 Accordingly, whether the difference in exacerbation rate between the two study groups was due to the weaning of inhaled corticosteroid at study entry in patients allocated to dual bronchodilation is not clear. This hypothesis fits with the rapid divergence (within 4 weeks of entry in the randomisation phase) of the two groups and the later parallel course when looking at the chance of having an exacerbation.. An analysis of the primary endpoint within subgroups defined according to inhaled corticosteroid treatment before entering the study would therefore be welcome.

Mots-clefs

Investigations for fetal and neonatal alloimmune thrombocytopenia: communication from the SSC of the ISTH.

Petermann R, Bakchoul T, Curtis BR, **Mullier F**, Miyata S, Arnold DM; Subcommittee on Platelet Immunology.

Références	*Doi*	*IF*
J Thromb Haemost. 2018 Dec;16(12):2526-2529	*10.1111/jth.14294*	*4,899*

Abstract

Mots-clefs

Development of a tool for benchmarking of clinical pharmacy activities.

Cillis M, **Spinewine A, Krug B**, Quennery S, Wouters D, Dalleur O.

Références	*Doi*	*IF*
Int J Clin Pharm. 2018 Dec;40(6):1462-1473	*10.1007/s11096-018-0725-6*	*1,508*

Abstract

BACKGROUND

Initiatives are needed to promote and evaluate clinical pharmacy. In this context, benchmarking could be useful. Objective To develop and validate a benchmarking tool for clinical pharmacy activities. Setting Six Belgian hospitals.

METHOD

A narrative literature review and two focus groups were performed to identify (1) clinical pharmacy benchmarking projects, (2) clinical pharmacy activities with a proven positive impact on the quality of care for patients, (3) quality indicators and (4) contextual factors to be included in the tool. Next, a Delphi survey and a test of the tool in practice led to content validation and usability of the benchmarking tool. Main Outcome Measure To identify quality indicators and contextual factors to be included in the tool.

RESULTS

Three Delphi rounds were required (rounds 1-2: 9 participants, round 3: 8 participants). Ten quality indicators and 36 relevant contextual factors were selected. These 10 quality indicators represent 6 clinical pharmacy activities that demonstrated to improve patient outcomes: medication reconciliation at admission, patient monitoring, information provided to the health care team, patient education, discharge and transfer medication counselling, and adverse drug reaction monitoring. To collect the information needed to compose the quality indicators and to benchmark, the tool consists of three data collection instruments. An instruction manual accompanies the tool.

CONCLUSION

We have developed and validated a benchmarking tool, designed to identify and promote clinical pharmacy activities that demonstrated to improve patient outcomes. Future perspectives include the use of the tool on a national scale to identify the most efficient practices and their enablers and barriers.

Mots-clefs

Belgium; Benchmarking; Delphi technique; Hospital pharmacy; Pharmacists; Pharmacy service; Quality indicators

Robotic beating-heart totally endoscopic coronary artery bypass.

Melly L, Douglas D, Jansens JL

Références	*Doi*	*IF*
Ann Cardiothorac Surg. 2018 Sep;7(5):707-709	*10.21037/acs.2018.06.13*	*0,71*

Abstract

Since the mid-nineties, minimally invasive direct coronary artery bypass grafting (MIDCAB) has evolved thanks to technological development of robotically assisted coronary surgery known as totally endoscopic coronary artery bypass (TECAB). Here, we report the case of a 51-year old lady with typical angina pectoris without any other relevant comorbidity. The angiogram showed a single and severe lesion at the ostium of the left anterior descending (LAD) coronary artery. Following an interdisciplinary heart team approach, a TECAB was proposed and accepted by the patient. This tutorial demonstrates the technical aspects of a single beating-heart TECAB

Mots-clefs

Surprescription d'inhibiteurs de la pompe à protons dans la pathologie respiratoire de l'enfant : mythe ou réalité ?

Somville V, Gueulette E, Bodart E.

Références	*Doi*	*IF*
J Pharm Bel Sept 2018 ;100(3) :32-37		*1,16*

Abstract

Le reflux gastro-œsophagien (RGO) est un processus physiologique présent chez les nourrissons et les enfants en bonne santé. Il est à différencier du RGO pathologique associé à des symptômes invalidants ou à des complications. Un traitement par inhibiteur de la pompe
à protons (IPP) est proposé en cas de suspicion de RGO pathologique. Les effets indésirables sont nombreux : majoration du risque de sensibilisation aux allergènes alimentaires, augmentation probable du risque d'infections digestives, ORL et respiratoires, diarrhée ou constipation, nausées, …

Une étude rétrospective a été réalisée de janvier à juin 2017 sur 2 sites du CHU UCL Namur. Les critères d'inclusion comprenaient un âge inférieur à trois ans et une première consultation en pneumologie pédiatrique. Le but était de relever les prescriptions d'oméprazole chez l'enfant présentant une symptomatologie respiratoire. 107 patients ont été inclus dans l'étude (en excluant les patients atteints de mucoviscidose, de dyskinésie ciliaire primitive, d'un déficit immunitaire ou d'une infirmité motrice cérébrale).
39 (36,4%) avaient bénéficié ou bénéficiaient toujours d'un traitement par oméprazole. 5 pH-métries de 24 heures avant mise en place du traitement avaient été réalisées de même que 5 fibroscopies ORL ayant motivé la prescription. 27 des 39 patients ont été traités par oméprazole pour des plaintes essentiellement respiratoires, les 12 autres pour des plaintes digestives, associées à un encombrement touchant les voies respiratoires supérieures.

Les IPP inhibent la sécrétion acide. La fréquence de leur prescription en pédiatrie augmente souvent sans pathogénicité du RGO prouvée. La surprescription d'IPP entraine un coût non négligeable pour le patient, sa famille et la société avec le risque de survenue d'effets indésirables de plus en plus décrits. Sensibiliser les différents praticiens à cette problématique semble indispensable.

Mots-clefs

Reflux gastro-oesophagien pathologique ; Inhibiteurs de la pompe à protons ; Symptômes respiratoires ; Population pédiatrique ; Effets indésirables.

Comment aborder la sexualité avec un homme ?

Di Gregorio M, Lorge F, Reynaert C, Michaux N.

Références	*Doi*	*IF*
Louvain Médical 2018;137(8):468-476		*0,05*

Abstract

La communication avec le patient lors d'une consultation de sexologie est un sujet sensible qui demande une approche spécifique. La difficulté première dans la prise en charge d'un problème sexuel est de…réussir à aborder le sujet. Le patient a des demandes concernant des problèmes touchant de près ou de loin à la sexualité, l'activité sexuelle et ses conséquences. La question et de savoir si les médecins généralistes préfèrent éviter d'avoir à répondre à des questions concernant ce sujet ou s'ils souhaitent y répondre activement. Si c'est le cas : dans quelle mesure sont-ils capables d'y répondre et éventuellement sont-ils prêts à s'engager dans des formations dans ces domaines et sont-ils disposés à travailler en collaboration avec des spécialistes dans un système de réseaux. Le but de ce travail est de donner des outils pour l'acquisition et la maîtrise d'un ensemble de connaissances et de pratiques médicales concernant les troubles sexuels masculins (dysfonctions sexuelles érectiles, troubles de l'éjaculation et de la libido) et d'acquérir une maîtrise de communication au sens de la consultation. (Relation médecin/patient).

Mots-clefs

Sexualité homme ; troubles sexuelles ; dysfonction érectile ; troubles de l'éjaculation

Comment aborder la sexualité avec une femme en consultation médicale ?

Michaux N, Marotta ML, Di Gregorio M, Reynaert C.

Références	*Doi*	*IF*
Louvain Médical 2018;137(8):477-482		*0,05*

Abstract

Cet article explique de manière très concrète comment aborder la sexualité avec une patiente en consultation, toute discipline confondue. Au moment de l'anamnèse, l'enjeu sera de prendre le temps d'y intégrer une simple question concernant la santé sexuelle et d'écouter la réponse de manière empathique, active et ouverte. Au moment du diagnostic d'une éventuelle dysfonction sexuelle, l'importance sera d'intégrer la notion de satisfaction sexuelle dont l'absence définit le trouble sexuel. Tout médecin à qui une patiente confie une plainte d'origine sexuelle peut prendre part à son traitement. Tout d'abord en l'informant sur la base de la physiologie de la sexualité féminine qui sera décrite dans l'article. Celle-ci comporte trois phases, la phase de désir, la phase d'excitation et la phase de plaisir. Et c'est selon un modèle circulaire qu'a lieu la réponse sexuelle féminine. Ensuite, le médecin pourra aussi prescrire des traitements non-spécifiques des dysfonctions sexuelles féminines en traitant une éventuelle pathologie non-sexologique constituant un facteur déclenchant, en optimalisant la phase d'excitation ou en donnant des conseils, communs en apparence, mais qui peuvent avoir un impact énorme sur la santé sexuelle de nos patientes. Ces concepts simples, synthétisés dans cet article, démontrent que parler de sexualité à nos patientes en consultation n'est pas compliqué ; ce qui est difficile, c'est de franchir la barrière de l'intimité et d'intégrer ces connaissances en sexologie dans une réalité toujours complexe.

Mots-clefs

Sexologie ; trouble sexuel ; femme ; consultation ; médecine ; physiologie ; traitement

Comment aborder la sexualité avec un couple ?

Reynaert C, Dubois T, Di Gregorio M, Michaux N.

Références	*Doi*	*IF*
Louvain Médical 2018;137(8):483-485		*0,05*

Abstract

L'article met en évidence l'intérêt de travailler avec le couple dans beaucoup de situations médicales et en particulier en sexologie. Des stratégies de communication sont proposées pour en arriver à la conclusion que travailler avec le système relationnel de nos patients fait partie de l'art de notre métier.

Mots-clefs

Sexologie ; couple ; communication

Cancer et sexualité.

Nuytten M, Faugeras L, D'Hondt L.

Références	*Doi*	*IF*
Louvain Médical 2018;137(8):486-491		*0,05*

Abstract

Les répercussions sexuelles du cancer et de ses traitements ont longtemps été considérées comme secondaires. Une prise de conscience relativement récente quant à l'importance de la dimension sexuelle du patient cancéreux s'est cependant largement développée. Ceci a entrainé un regain d'intérêt scientifique et la publication de lignes de conduites internationales. Dans cet article nous détaillons les principaux troubles sexuels rencontrés par les patients cancéreux, masculins et féminins. Parmi ceux-ci, chez la femme ce sont surtout diminution de la libido et dyspareunie qui sont le plus souvent observés. Chez l'homme, c'est la dysfonction érectile et la diminution de la libido qui constituent les problèmes majeurs. Ces troubles peuvent avoir des répercussions conséquentes sur la vie de couple. Nous décrivons également les effets secondaires des différents traitements anti-cancéreux sur la sphère sexuelle et enfin nous donnons quelques conseils et traitements non pharmacologiques pour leur prise en charge.

Mots-clefs

Cancer et sexualité

Vie affective, relationnelle et sexuelle des personnes en situation de handicap : quelles ressources pour s'informer et informer ?

Koopmans V, Moreau MA, Berrewaerts J, **Michaux N.**

Références	*Doi*	*IF*
Louvain Médical 2018;137(8):492-495		*0,05*

Abstract

Cet article apporte à tout professionnel de la santé intéressé par la question de la vie relationnelle, affective et sexuelle des personnes en situation de handicap, des idées d'initiatives à conseiller aux personnes qu'il accompagne. Après une présentation du Centre de Ressources Handicaps et Sexualités présent sur tout le territoire wallon, plusieurs ressources seront explorées (soirées entre institutions, outils pédagogiques, sites internet, etc.). Aujourd'hui, cette thématique est davantage prise en considération. Toutefois, les besoins sont encore loin d'être comblés.

Mots-clefs

Vie sociale ; relations amoureuses ; sexualité ; handicap ; ressources ; outils pédagogiques

Early diagnosis of dehydration in hospitalized geriatric patients using clinical and laboratory criteria.

Betomvuko P, de Saint Hubert M, Schoevaerdts D, Jamart J, Devuyst O, Swine C.

Références	*Doi*	*IF*
Eur Ger Med 2018;9(5) :589-595	*10.1007/s41999-018-0100-0*	*1,169*

Abstract

Abstract Context Dehydration is a common yet underdiagnosed condition, which is associated with poor prognosis in older patients. The clinical and laboratory criteria for assessing dehydration are of variable or poor diagnostic value in this population and require further validation. Objectives To test different clinical and laboratory criteria for the early diagnosis of dehydration in hospitalized older patients as compared to the standard diagnosis based on a body weight gain ≥ 3% during the first week of admission. Design Prospective study using clinical and laboratory criteria for dehydration selected by an expert panel. Setting Acute geriatric unit. Participants Geriatric patients (n = 112; aged 83 ± 6 years) admitted to the unit. Measurements Using selected criteria (skin fold, dry mouth, calf muscle consistency, systolic blood pressure ‹ 90 mmHg, orthostatic blood pressure drop, postural dizziness, thirst, apathy or delirium, urea, creatinine, uric acid, proteins, hemoglobin), expert clinicians prospectively assessed the patients to make a clinical diagnosis of dehydration upon admission. Clinicians were asked to provide a yes/no answer for each criterion and a global yes/no answer for dehydration, along with its estimated probability. Body weight was measured at admission and at Day 7. Laboratory parameters were assessed at baseline and at Day 7. The clinical diagnosis made at admission was retrospectively compared to the standard diagnosis made at Day 7 (› 3% weight gain) to test the values of each criterion separately, the global diagnosis, and its estimated probability. Results In total, 100 patients with complete data (mean age 83 ± 6 years) were considered for analysis. Dehydration was the principal reason for admission in three patients only but was clinically diagnosed as part of the study in 39 patients, whereas the standard diagnosis of dehydration was ascertained in 20. Inter-rater agreement (kappa) was fair for the clinical criteria and clinical diagnosis, moderate to near perfect for the laboratory criteria, and substantial for the estimated probability of dehydration. When matched with the standard diagnosis, the final clinical diagnosis of dehydration had 70% sensitivity and 69% specificity, with a 90% negative predictive value. Individually, both clinical and laboratory criteria had good specificity (65–90%), but poor sensitivity (‹ 55%). Conclusions Compared with the standard diagnosis, dehydration was overdiagnosed by systematic clinical assessment upon admission in this frail population. However, clinicians performed better at excluding dehydration. Clinical acumen seems better than any individual clinical symptom or sign.

Mots-clefs

Dehydration, Geriatric, Patients, Clinical, Laboratory, Diagnosis

OCTOBRE

An Epidemiological Survey of Venous Disease Among General Practitioner Attendees in Different Geographical Regions on the Globe: The Final Results of the Vein Consult Program.

Vuylsteke ME, Colman R, Thomis S, **Guillaume G**, Van Quickenborne D, Staelens I.

Références	*Doi*	*IF*
Angiology. 2018;69(9):779-785	*10.1177/0003319718759834*	*3,022*

Abstract

This study measured the prevalence of chronic venous disease (CVD, C1-C6), chronic venous insufficiency (C3-C6) in 23 countries. The possible influence of risk factors was assessed. Patient recruitment was carried out by general practitioners. Patient characteristics, prevalence of risk factors, and C-classification were recorded. We assessed differences in prevalence and risk factors between Asia (A), Eastern Europe (EE), Latin America (LA), and Western Europe (WE). A total of 99 359 patients were included. The prevalence of CVD (51.9% A, 70.18% EE, 68.11% LA, and 61.65% WE) was significantly (P ‹ .001) lower in A. Risk factors such as age, obesity, smoking, having regular exercise, use of birth control pills, prolonged standing and sitting, and having a positive family history differ significantly between regions. After model-based probabilities corrected for risk factors, significant differences in the probability of having CVD were only found in the older age-group (›65 years). The lowest prevalence was noted in A. Chronic venous disease is very common and the prevalence varies between different geographical areas. After correcting for risk factors, these differences diminished.

Mots-clefs

Vein Consult Program; epidemiological study; venous disease

Measurement of factor VIII activity of efraloctocog alfa with commercially available one-stage clotting and chromogenic assays: Results from the Belgian national External Quality Assessment Scheme.

Van Blerk M, **Chatelain B**, Devreese K, Jacquemin M, Jochmans K, **Mullier F**, Soumali MR, Broeders S.

Références	*Doi*	*IF*
Int J Lab Hematol. 2018 Oct 6. [Epub ahead of print]	*10.1111/ijlh.12931*	*1,919*

Abstract

This study aimed to assess the performance of the activated partial thromboplastin time (aPTT)-based one-stage clotting assays and chromogenic methods used in the Belgian and Luxembourg clinical laboratories for measuring factor VIII activity (FVIII:C) in samples containing rFVIIIFc.

Mots-clefs

Outcome of Pregnancies in Female Patients With Inflammatory Bowel Diseases Treated With Vedolizumab.

Moens A, van Hoeve K, Humblet E, **Rahier JF**, Bossuyt P, Dewit S, Franchimont D, Macken E, Nijs J, Posen A, Strubbe B, Van Hootegem A, Van Moerkercke W, Vermeire S, Ferrante M; Belgian IBD Research and Development group (BIRD).

Références	*Doi*	*IF*
J Crohns Colitis. 2018 Oct 3. [Epub ahead of print]	*10.1093/ecco-jcc/jjy142*	*6,637*

Abstract

BACKGROUND AND AIMS:
Vedolizumab is an IgG1 anti-α4β7 integrin antibody approved for the treatment of inflammatory bowel diseases [IBD], but without clear safety data during conception, pregnancy and nursing. Animal studies showed that mucosal vascular addressin cell adhesion molecule 1 [MAdCAM-1] is expressed by maternal vessels in the placenta and recruits α4β7-expressing cells that are considered important for maternal/fetal tolerance. Blocking this interaction by vedolizumab might affect this process. We aimed to evaluate pregnancy outcomes in vedolizumab-treated female IBD patients.
METHODS:
We conducted a retrospective, multicentre Belgian observational study. Details on disease activity, prenatal complications, delivery and neonatal outcome were collected through a case report form.
RESULTS:
Twenty-four pregnancies were reported. Five women had active disease at conception and one patient flared during pregnancy. There were 23 live births. Complications were observed in 25% of pregnancies [premature rupture of membranes, pre-eclampsia, miscarriage, elective termination and stillbirth] and in 35% of infants [prematurity, intra-uterine growth retardation, small for gestational age and congenital malformations including hip dysplasia, pulmonary valve stenosis and Hirschprung's disease]. Vedolizumab was continued throughout pregnancy in two females and stopped in the 1st and 2nd trimester in five and 16 patients, respectively. For live born children, the median [interquartile range] gestational age, weight and Apgar score 5 min after birth were 39 [37-39.6] weeks, 3270 [3080-3585] grams and 10 [9-10], respectively.
CONCLUSIONS:
Although several complications were observed, both in mothers and in newborns, no firm conclusions can be drawn. Awaiting prospective and controlled registries, vigilance and strict follow-up of pregnant patients treated with vedolizumab seems mandatory.

Mots-clefs

Inflammatory Bowel Diseases, pregnancy, vedolizumab

The relationship between Home-time, quality of life and costs after ischemic stroke: the impact of the need for mobility aids, home and car modifications on Home-time.

Dewilde S, Annemans L, Peeters A, Hemelsoet D, **Vandermeeren Y**, Desfontaines P, Brouns R, Vanhooren G, Cras P, Michielsens B, Redondo P, Thijs V.

Références	*Doi*	*IF*
Disabil Rehabil. 2018 Oct 2:1-7. [Epub ahead of print]	*10.1080/09638288.2018.1501438*	*2,042*

Abstract

PURPOSE:
Home-time (the number of days spent at home during the first 3 months after stroke) shows a strong association with the modified Rankin scale (mRS). We studied whether Home-time was also a determinant of quality-of-life and medical care costs after ischemic stroke, and assessed factors delaying discharge home.

MATERIALS AND METHODS:
Five hundred and sixty nine patients participated in a retrospective study when returning for an in-person visit after an ischemic stroke. Home-time, mRS, EQ-5D-3L, inpatient and outpatient resource utilization, use of mobility aids, changes to home and car, comorbidities were recorded.

RESULTS:
Each additional Home-time day was significantly associated with an increase in utility of 0.0056 ($p < 0.0001$) and an in- and outpatient cost saving of \$99 ($p = 0.0158$). Requiring extra material support significantly decreased Home-time by 76 days (including: requiring home changes: -68 days, car alterations: -49 days, needing a wheelchair: -80 days or walker: -71 days, needing bed or bath rails: -79 days). This univariable effect was confirmed in multivariable analysis when comparing with patients having the same disability level without requiring material support.

CONCLUSIONS:
Home-time is a stroke outcome associated with disease severity, healthcare costs and patient wellbeing. Streamlining the discharge process for those requiring extra material support may lead to cost savings and higher quality-of-life. Implications for rehabilitation Delays in discharge from the acute hospital or rehabilitation facility are incurred when patients need extra material support in order to return home. Staff from the discharging facility should assist families by giving timely information on the availability and the cost of wheel chairs and walkers; and explaining and planning the need of a stair lift, bed and bath rails as well as car modifications. Planning the discharge process with the families will lead to a more rapid return home and will result in reduced overall health care costs and higher quality of life for the patients.

Mots-clefs

Home-time; disability; mRS; quality of life; resource use; stroke

A Belgian consensus strategy to identify familial hypercholesterolaemia in the coronary care unit and its subsequent cascade screening and treatment: BEL-FaHST (The BELgium Familial Hypercholesterolaemia STrategy).

Descamps OS, Van Caenegem O, Hermans MP, Balligand JL, Beauloye C, Bondue A, Carlier S, Castermans E, Chenot F, Claeys M, De Block C, de Leener A, De Meester A, **Demeure F**, De Raedt H, Desmet W, Elegeert I, Guillaume M, Hoffer E, Kacenelenbogen R, Lancellotti P, Langlois M, Leone A, Mertens A, Paquot N, Vanakker O, Vanoverschelde JL, Verhaegen A, Vermeersch P, Wallemacq C, Rietzschel E; Belgian Atherosclerosis Society/ Belgian Lipid Club (BAS/BLC), the Belgian Society of Cardiology (BSC) and the Royal Belgian Society of Laboratory Medicine (RBSLM).

Références	*Doi*	*IF*
Atherosclerosis. 2018;277:369-376.	*10.1016/j.atherosclerosis.2018.05.037.*	*4,467*

Abstract

BACKGROUND AND AIMS:

Familial hypercholesterolaemia (FH) is an autosomal dominant lipoprotein disorder characterized by significant elevation of low-density lipoprotein cholesterol (LDL-C) and markedly increased risk of premature cardiovascular disease (CVD). Because of the very high coronary artery disease risk associated with this condition, the prevalence of FH among patients admitted for CVD outmatches many times the prevalence in the general population. Awareness of this disease is crucial for recognizing FH in the aftermath of a hospitalization of a patient with CVD, and also represents a unique opportunity to identify relatives of the index patient, who are unaware they have FH. This article aims to describe a feasible strategy to facilitate the detection and management of FH among patients hospitalized for CVD.

METHODS:

A multidisciplinary national panel of lipidologists, cardiologists, endocrinologists and cardio-geneticists developed a three-step diagnostic algorithm, each step including three key aspects of diagnosis, treatment and family care.

RESULTS:

A sequence of tasks was generated, starting with the process of suspecting FH amongst affected patients admitted for CVD, treating them to LDL-C target, finally culminating in extensive cascade-screening for FH in their family. Conceptually, the pathway is broken down into 3 phases to provide the treating physicians with a time-efficient chain of priorities.

CONCLUSIONS:

We emphasize the need for optimal collaboration between the various actors, starting with a «vigilant doctor» who actively develops the capability or framework to recognize potential FH patients, continuing with an «FH specialist», and finally involving the patient himself as «FH ambassador» to approach his/her family and facilitate cascade screening and subsequent treatment of relatives.

Mots-clefs

Autosomal dominant lipoprotein disorder; Cardiovascular disease; Coronary care unit; Familial hypercholesterolaemia; Low-density lipoprotein cholesterol

Sublingual Sufentanil Tablet System for Postoperative Pain Relief after Spinal Lumbar Neurosurgery. A Retrospective Comparison with IV Morphine Patient Controlled Analgesia

Dransart C, De Bue P, Jamart J, Mitchell J, Gustin T, Dubois P.

Références	*Doi*	*IF*
J Clin Anesth Pain Med, 2018;2(2) :022		

Abstract

Background: An enhanced and rapid recovery after surgery has become the new challenge to reduce postoperative complications and length of hospital stay. This retrospective study evaluated the benefits provided by the new sufentanil sublingual tablet system (SSTS) compared to patient controlled analgesia (PCA) with intravenous (IV) morphine in the specific context of spinal lumbar neurosurgery. Method: We selected 80 patients undergoing 1-2 levels lumbar laminectomy and/or discectomy to evaluate the SSTS. A second group was retrospectively constituted with 80 patients having benefited from the same surgery with IV morphine PCA during the period just preceding the SSTS test period. All patients received similar intraoperative multimodal analgesia. In post anesthesia care unit, piritramide (SSTS group) or morphine (IV PCA group) was titrated intravenously to insure a pain score below 4/10 before PCA initiation. The acute pain service evaluated on Day 1 and Day 2 the pain intensity (visual analogic score at rest and during mobilization) and opioid related side effects. Results were compared using Mann-Whitney-Wilcoxon test, $p<0.05$ was considered significant. Any comments of the health care personal were collected during the SSTS test. Results: The mean uptake after 48 hours was 34.99 mg IV morphine and 18.60 sufentanil tablets. Except for Day 1 at rest, pain intensity evaluations were significantly different between both groups, in favor of the IV PCA. There was no significant difference in side effects between groups. Valuable technical and practical comments were collected from patients and nurses, and were discussed. Conclusion: Despite a significant difference in postoperative pain scores, we demonstrated the overall satisfaction of the patients and the health care personal for the innovative system but some questions and problems were highlighted and would benefit from technical improvements, administrative refinements and further dedicated studies.

Mots-clefs

Analysis of particulate exposure during continuous drug infusion in critically ill adult patients: a preliminary proof-of-concept in vitro study.

Benlabed M, Martin Mena A, Gaudy R, Perez M, Genay S, **Hecq JD**, Odou P, Lebuffe G, Décaudin B.

Références	*Doi*	*IF*
Intensive Care Med Exp. 2018;6(1):38	*10.1186/s40635-018-0205-2*	*15,008*

Abstract

BACKGROUND:
In critically ill patients, drug incompatibilities frequently occur because of the number of drugs to be administered through a limited number of infusion lines. These are among the main causes of particulate contamination. However, little data is available to quantify particle exposure during simultaneous IV-drug infusion. The objective of this study was to evaluate the particulate matter potentially administered to critically ill patients.
METHODS:
The particulate matter (between 1 µm and 30 mm) of infused therapies used in ICUs for patients suffering from either septic shock or acute respiratory distress syndrome was measured in vitro over 6 h using a dynamic image analysis device, so that both overall particulate contamination and particle sizes could be determined. Data is presented according to the recommendations of the European Pharmacopoeia (≥ 10 and 25 µm).
RESULTS:
For the six experimental procedures (continuous infusion of norepinephrine, midazolam, sufentanil, heparin, 5% glucose, binary parenteral nutrition and discontinuous administrations of omeprazole, piperacillin/tazobactam and fluconazole), the overall number of particles over the 6-h infusion period was 8256 [5013; 15,044]. The collected values for the number of particles ≥ 10 and 25 µm were 281 [118; 526] and 19 [7; 96] respectively. Our results showed that discontinuous administrations of drugs led to disturbances in particulate contamination.
CONCLUSIONS:
This work indicates the amount of particulate matter potentially administered to critically ill adult patients. Particulate contamination appears lower than previous measurements performed during multidrug IV therapies in children.

Mots-clefs

Critical care; Drug incompatibility; Infusion pumps; Intravenous; Parenteral nutrition

Thalidomide as an effective treatment for adult multiple xanthogranuloma.

Debois D, Marot L, **Andre M, Dachelet C.**

Références	*Doi*	*IF*
JAAD Case Rep. 2018;4(9):896-898.	*10.1016/j.jdcr.2018.05.005*	*0,78*

Case report

A 51-year old white man came to our dermatology department, as he had been suffering from a symptomatic nodular eruption for 3 weeks. Originally, the nodules were bilateral and symmetrically located on the extensor surfaces, but they generalized after 3 weeks with no ophthalmologic or mucosal involvement. They were slightly itchy and painful. Tiredness, night sweats, and inflammatory arthralgia of proximal joints concomitantly began and increased over time. No other systemic involvement was noted.
his man was currently under the care of the hematology department for a rare myelodysplastic syndrome which appeared 2 years prior. Chromosomal analysis on medullar biopsy found a karyotype 45 X-Y with a rare translocation of t(9;12)(q22;p13). Initially, the myelodysplasia was successfully controlled with hydroxyurea and methylprednisolone. However, biological analysis showed an increased eosinophilia (1150/mm3) accompanying the dermatologic disorder with a slight inflammatory syndrome (C-reactive protein, 46.40 mg/L). There was no other significant biological disruption. The histopathologic examination of a nodule found a dense granulomatosis infiltrate mainly composed of histiocytes intermingled with collagen bundles, few neutrophils, eosinophils, and lymphocytes. The infiltrate was perivascular and mostly interstitial and reached the reticular dermis. Immunohistochemistry found a strong positive reaction to CD163 and negative reactions to the S100 protein and CD1a. A diagnosis of eruptive xanthogranuloma was thereby established on the basis of clinicopathologic correlation. The patient had to be admitted to the hematologic department for pain management. Upon admission, bone marrow biopsies did not show any evolution into an acute leukemia or myelodysplasia worsening. In coordination with the hematologist, interferon-α2a and methylprednisolone (64 mg) were initiated. Eventually, the general condition of the patient improved with a decrease of the pain scale and a flattening of the skin lesions. However, systemic corticotherapy had to be progressively stopped because of side effects (Cushing face, headache, increased anxiety, and depressive syndrome) which predominantly triggered a relapse of both the nodules and the systemic symptoms. Topical corticotherapy and photochemotherapy (ultraviolet A) failed to show any clinical benefit, whereas thalidomide (50 mg/d) successfully improved the patient's quality of life, resolving cutaneous lesions, and stabilizing the hematologic disease after 3 weeks on thalidomide. The patient still remains stable after 2 years of treatment.

Mots-clefs

XG, xanthogranulomatosis; adult multiple xanthogranuloma; myelodysplastic syndrome; non-Langerhans cells histiocytosis; thalidomide; xanthogranulomatosis

Colitis alters oxysterol metabolism and is affected by 4β-hydroxycholesterol administration.

Guillemot-Legris O, Mutemberezi V, Buisseret B, Paquot A, Palmieri V, Bottemanne P, Lemaire J, **Rahier JF**, Alhouayek M, Muccioli GG.

Références	*Doi*	*IF*
J Crohns Colitis. 2018 Oct 6. [Epub ahead of print]	*10.1093/ecco-jcc/jjy157*	*6,637*

Abstract

BACKGROUND AND AIMS:

Inflammatory bowel diseases (IBD) represent a challenging health issue with a complex etiology implicating genetic and environmental parameters. Although the understanding of their pathophysiology has improved, much remains to be explored. In this context, bioactive lipids, more specifically oxysterols, i.e. oxygenated derivatives of cholesterol, represent an interesting avenue to investigate. Indeed, oxysterols or their receptors are involved in inflammation and immune regulation. Therefore, we set out to study the oxysterome in IBD.

METHODS:

We used both HPLC-MS and molecular biology tools to quantify oxysterol levels and the expression of their metabolic enzymes in several models of murine colitis (both acute and chronic), as well as in colon biopsies from patients with Crohn's disease and ulcerative colitis.

RESULTS:

We found that the oxysterome is altered in IBD, both in acute and chronic murine models as well as in human IBD. Two of the oxysterols quantified, 4β-hydroxycholesterol and 25-hydroxycholesterol, were consistently altered in all of our models and therefore could be of interest in this context. Hence, we administered them to mice with colitis. While 25-hydroxycholesterol had no effect, 4β-hydroxycholesterol worsened colon inflammation.

CONCLUSIONS:

Our study addresses the potential involvement of oxysterols in colitis and clearly points towards an active role as well as a clinical relevance for these bioactive lipids.

Mots-clefs

Obinutuzumab plus Lenalidomide (GALEN) for the treatment of relapse/refractory aggressive lymphoma: a phase II LYSA study.

Houot R, Cartron G, Bijou F, de Guibert S, Salles GA, Fruchart C, Bouabdallah K, Maerevoet M, Feugier P, Le Gouill S, Tilly H, Casasnovas RO, Moluçon-Chabrot C, Van Den Neste E, Zachee P, **Andre M**, Bonnet C, Haioun C, Van Hoof A, Van Eygen K, Molina L, Nicolas-Virelizier E, Ruminy P, Morschhauser F.

Références	*Doi*	*IF*
Leukemia. 2018 Oct 5. [Epub ahead of print]	*10.1038/s41375-018-0282-y*	*10,023*

Abstract

Mots-clefs

The anticoagulant effect of dabigatran is reflected in the lag time and time-to-peak, but not in the endogenous thrombin potential or peak, of thrombin generation.

Bloemen S, Zwaveling S, Douxfils J, Roest M, Kremers R, **Mullier F**.

Références	*Doi*	*IF*
Thromb Res. 2018 Oct 6;171:160-166. [Epub ahead of print]	*10.1016/j.thromres.2018.10.005*	*2,779*

Abstract

INTRODUCTION:
Calibrated automated thrombinography (CAT) is a sensitive method to assess coagulation. Dabigatran inhibits both free thrombin and the α2macroglobulin (α2M)-thrombin complex, which results in an erroneously increased peak and endogenous thrombin potential (ETP) without affecting lag time and time-to-peak. The aim of this study was to elucidate the artefacts in CAT when dabigatran is present.

MATERIALS AND METHODS:
Thrombin generation (TG) was measured in vitro by using CAT in the presence or absence of 6 μM idarucizumab in plasma spiked with dabigatran. Additionally, ex vivo measurements were performed in plasmas of 63 patients using dabigatran in the presence and absence of idarucizumab.

RESULTS:
The in vitro experiments confirmed that the ETP, peak and velocity index were artificially increased. This was mainly due to the inhibition of the calibrator by dabigatran and partly due to CAT algorithms. The calibration artefact could be resolved by adding idarucizumab to the calibrator well. However, the second, mathematical artefact remains when dabigatran is present in the TG well. These findings were corroborated by ex vivo experiments i.e. the lag time and time-to-peak were significantly reduced in patients upon addition of idarucizumab, but the ETP and peak were not significantly affected. The velocity index did change significantly, since this is a combination of time-dependent factors and the peak.

CONCLUSIONS:
The peak, ETP and velocity index do not represent the anticoagulant effect of dabigatran on TG measured with CAT. The lag time and time-to-peak, however, do reflect the effect of dabigatran.

Mots-clefs

Anticoagulant; Dabigatran; Idarucizumab; Thrombin generation

Increased IgA Expression in Lung Lymphoid Follicles in Severe COPD.

Ladjemi MZ, Martin C, Lecocq M, Detry B, Aboubakar Nana F, Moulin C, Weynand B, Fregimilicka C, Bouzin C, **Thurion P**, Carlier F, Serré J, Gayan-Ramirez G, **Delos M, Ocak S**, Burgel PR, Pilette C.

Références	*Doi*	*IF*
Am J Respir Crit Care Med. 2018 Oct 19. [Epub ahead of print]	*10.1164/rccm.201802-0352OC*	*15,239*

Abstract

RATIONALE:
Accumulation of B cells and lymphoid follicles (LF) has been described in chronic obstructive pulmonary disease (COPD) airways, but the functional status of lung B cells remains poorly known.
OBJECTIVES:
The aim of this study was to characterize LF for expression of IgA, the main mucosal antibody.
METHODS:
The presence of B cells and LF, including intra-follicular IgA expression, were determined in the lung from COPD patients (n=37) versus controls (n=34) by immunohistochemistry. We also evaluated follicular IgA responses in the lungs from mice infected with Pseudomonas aeruginosa (PAO1) (n=10 per group) and in smoking mice.
MEASUREMENTS AND MAIN RESULTS:
Whereas in smokers B cell numbers slightly increased, robust increases in B cell and LF numbers (mainly in distal airwayws) were only observed in severe COPD. The majority of follicular B cells were IgM+ (70-80%), but IgA+ (and not IgG+) B-cell numbers were increased in LF from severe COPD compared to controls (two-fold, 44.7% vs 25.2%), and this was significant in distal but not proximal airways. Follicular IgA response was also observed in PAO1-infected mouse lungs, but not following smoke exposure. Moreover, follicular IgA expression associated with expression of IL-21, which was very potent to activate Ig production in vitro.
CONCLUSIONS:
This study shows that IgA production occurs in peribronchiolar LF from severe COPD, where IL-21-producing T cells are present, and presumably represents a feature of exacerbated mucosal adaptive immune responses against microbial and/or self-antigens.

Mots-clefs

B Lymphocytes; COPD; IgA; lymphoid follicles

Anodal Transcutaneous Spinal Direct Current Stimulation (tsDCS) Selectively Inhibits the Synaptic Efficacy of Nociceptive Transmission at Spinal Cord Level.

Lenoir C, **Jankovski A**, Mouraux A.

Références	*Doi*	*IF*
Neuroscience. 2018 Oct 12. [Epub ahead of print]	*10.1016/j.neuroscience.2018.10.007*	*3,382*

Abstract

Recently studies have aimed at developing transcutaneous spinal direct current stimulation (tsDCS) as a non-invasive technique to modulate spinal function in humans. Independent studies evaluating its after-effects on nociceptive or non-nociceptive somatosensory responses have reported comparable effects suggesting that tsDCS impairs axonal conduction of both the spino-thalamic and the medial lemniscus tracts. The present study aimed to better understand how tsDCS affects, in humans, the spinal transmission of nociceptive and non-nociceptive somatosensory inputs. We compared the after-effects of anodal low-thoracic, anodal cervical and sham tsDCS on the perception and brain responses elicited by laser stimuli selectively activating Aδ-thermonociceptors of the spinothalamic system and vibrotactile stimuli selectively activating low-threshold Aβ-mechanoreceptors of the lemniscal system, delivered to the hands and feet. Low-thoracic tsDCS selectively and significantly affected the LEP-N2 wave elicited by nociceptive stimulation of the lower limbs, without affecting the LEP-N2 wave elicited by nociceptive stimulation of the upper limbs, and without affecting the SEP-N2 wave elicited by vibrotactile stimulation of either limb. This selective and segmental effect indicates that the neuromodulatory after-effects of tsDCS cannot be explained by anodal blockade of axonal conduction and, instead, are most probably due to a segmental effect on the synaptic efficacy of the local processing and/or transmission of nociceptive inputs in the dorsal horn.

Mots-clefs

EEG; Transcutaneous spinal direct current stimulation; laser-evoked potentials; nociception; somatosensory system

Outcomes after early liver transplantation for patients with severe alcoholic hepatitis: Additional evidence from a meta-analysis.

Deltenre P, **Marot A**, Moreno C.

Références	*Doi*	*IF*
Gastroenterology. 2018 Oct 10. [Epub ahead of print]	*10.1053/j.gastro.2018.09.057*	*20,773*

Abstract

We read with interest the article from Lee et al1 about early liver transplantation for severe alcoholic hepatitis. We compliment them for their exhaustive collection of data on patients transplanted for alcoholic hepatitis across the United States in the retrospective ACCELARATE-AH study. We would like to add some comments that may contribute to the debate on this hot topic.

Mots-clefs

Isolated pulmonary valve endocarditis

Pireau L, **Doyen B**.

Références	*Doi*	*IF*
Acta Cardiol. 2018 Oct 25:1-2.	*10.1080/00015385.2018.1515320*	*0,876*

Abstract

Mots-clefs

Assessment of the optimal timing for early laparoscopic cholecystectomy in acute cholecystitis: a prospective study of the Club Coelio

Brunée L, Hauters P, Closset J, Fromont G, **Puia-Negelescu S;** Club Coelio.

Références	*Doi*	*IF*
Acta Chir Belg. 2018 Oct 25:1-7.	*10.1080/00015458.2018.1529344*	*0,42*

Abstract

BACKGROUND:
The optimal timing for cholecystectomy in patients with acute cholecystitis remains controversial. The aim of this study is to assess prospectively the impact of the duration of symptoms on outcomes in early laparoscopic cholecystectomy (ELC) for acute cholecystitis.

METHODS:
The series consisted of 276 consecutive patients who underwent ELC for acute cholecystitis in 2016. The patients were divided into three groups according to the timing of surgery: within the first 3 days (group 1), between 4 and 7 days (group 2) and beyond 7 days (group 3) from the onset of symptoms.

RESULTS:
The percentage of surgical procedure rated as difficult was respectively: 12% in G1, 18% in G2 and 38% in G3 ($p < .001$). Accordingly, we observed an increased mean operative time within groups but no significant difference in the conversion rate. We noted a different overall postoperative complication rate within groups, respectively: 9% in G1, 14% in G2 and 24% in G3 ($p < .04$). The median hospital stay was also different within groups, respectively: 3 in G1, 4 in G2 and 6 days in G3 ($p < .001$). On univariate analysis, age ≥60, male gender, ASA 3, WBC ≥13.000/µL, CRP ≥100 mg/l and delay between onset of symptoms and surgery were factors statistically associated with increased morbidity rate. On multivariate analysis, the delay was the only independent predictive factor of postoperative morbidity (OR: 1,08, 95% CI: 1.01-1.61, $p < .031$).

CONCLUSION:
Our study confirms that it is ideal to perform ELC within 3 days of symptoms onset and reasonable between 4 to 7 days. We do not recommend performing ELC beyond 7 days because of more difficult procedure and significantly increased risk of post-operative complications.

Mots-clefs

Cholecystitis; delay from onset of symptoms; early laparoscopic cholecystectomy; post-operative complications; surgical outcome

Therapeutic Potential of Focal Adhesion Kinase Inhibition in Small Cell Lung Cancer.

Aboubakar Nana F, Lecocq M, Ladjemi MZ, Detry B, Dupasquier S, Feron O, Massion PP, Sibille Y, Pilette C, **Ocak S.**

Références	*Doi*	*IF*
Mol Cancer Ther. 2019 Jan;18(1):17-27	*10.1158/1535-7163.MCT-18-0328*	*5,365*

Abstract

Small cell lung cancer (SCLC) has a poor prognosis. Focal adhesion kinase (FAK) is a non-receptor tyrosine kinase regulating cell proliferation, survival, migration, and invasion, which is overexpressed and/or activated in several cancers, including SCLC. We wanted to determine whether FAK contributes to SCLC aggressive behavior. We first evaluated the effect of FAK small-molecule inhibitor PF-573,228 in NCI-H82, NCI-H146, NCI-H196, and NCI-H446 SCLC cell lines. PF-573,228 (0.1-5 μmol/L) inhibited FAK activity by decreasing phospho-FAK (Tyr397), without modifying total FAK expression. PF-573,228 decreased proliferation, decreased DNA synthesis, induced cell-cycle arrest in G2-M phases, and increased apoptosis in all cell lines. PF-573,228 also decreased motility in adherent cell lines. To make sure that these effects were not off-target, we then used a genetic method to inhibit FAK in NCI-H82 and NCI-H446, namely stable transduction with FAK shRNA and/or FAK-related nonkinase (FRNK), a splice variant lacking the N-terminal and kinase domains. Although FAK shRNA transduction decreased total and phospho-FAK (Tyr397) expression, it did not affect proliferation, DNA synthesis, or progression through cell cycle. However, restoration of FAK-targeting (FAT) domain (attached to focal adhesion complex where it inhibits pro-proliferative proteins such as Rac-1) by FRNK transduction inhibited proliferation, DNA synthesis, and induced apoptosis. Moreover, although FAK shRNA transduction increased active Rac1 level, FRNK reexpression in cells previously transduced with FAK shRNA decreased it. Therefore, FAK appears important in SCLC biology and targeting its kinase domain may have a therapeutic potential, while targeting its FAT domain should be avoided to prevent Rac1-mediated protumoral activity.

Mots-clefs

Mandibular Movement Analysis to Assess Efficacy of Oral Appliance Therapy in OSA.

Martinot JB, Le-Dong NN, Crespeigne E, Silkoff PE, Cuthbert V, Denison S, Borel JC, Pépin JL.

Références	*Doi*	*IF*
Chest. 2018 Dec;154(6):1340-1347.	*10.1016/j.chest.2018.08.1027*	*7,652*

Abstract

RATIONALE:
The respiratory effort index derived from vertical mandibular movements (MM-REI) is a potential marker of increased respiratory effort during sleep. We evaluated the effectiveness of mandibular advancement splint therapy using MM-REI, in comparison with the apnea-hypopnea index (AHI) and oxygen desaturation index (ODI).

METHODS:
Fifty-six subjects (median age, 47 years) with OSA treated with a custom mandibular advancement splint (Herbst appliance) were evaluated at the end of the titration procedure when snoring was reported absent by the sleep partner. We employed a magnetometer to capture mandibular movements (Brizzy; Nomics). Mandibular advancement splint efficacy was assessed as the percent change from baseline, using Bayesian multilevel models.

RESULTS:
At the end of titration, all indices of OSA severity decreased compared with baseline: AHI (-48.9% to -71.1%), ODI (-49.5% to -77.2%), with obstructive hypopnea index and MM-REI showing the largest responses (-70.6% to -88.5% and -69.5% to -96.3%, respectively). MM-REI normalization via reductions in both mandibular movement event rate and duration accurately reflected efficacy of the appliance.

CONCLUSIONS:
The reduction of vertical respiratory mandibular movements estimated by MM-REI and sleep respiratory effort duration accompanied the decrease in obstructive hypopneas, AHI, and ODI when snoring resolved in subjects with OSA treated with an optimally titrated mandibular advancement splint

Mots-clefs

OSA; mandibular advancement device; mandibular movements; oral appliance

Impact of functional inorganic nanotubes f-INTs-WS2 on hemolysis, platelet function and coagulation.

Laloy J, **Haguet H,** Alpan L, Raichman D, Dogné JM, Lellouche JP

Références	*Doi*	*IF*
Nano Converg. 2018 Oct 30;5(1):31.	*10.1186/s40580-018-0162-1*	

Abstract

Inorganic transition metal dichalcogenide nanostructures are interesting for several biomedical applications such as coating for medical devices (e.g. endodontic files, catheter stents) and reinforcement of scaffolds for tissue engineering. However, their impact on human blood is unknown. A unique nanomaterial surface-engineering chemical methodology was used to fabricate functional polyacidic polyCOOH inorganic nanotubes of tungsten disulfide towards covalent binding of any desired molecule/organic species via chemical activation/reactivity of this former polyCOOH shell. The impact of these nanotubes on hemolysis, platelet aggregation and blood coagulation has been assessed using spectrophotometric measurement, light transmission aggregometry and thrombin generation assays. The functionalized nanotubes do not induce hemolysis but decrease platelet aggregation and induce coagulation through intrinsic pathway activation. The functional nanotubes were found to be more thrombogenic than the non-functional ones, suggesting lower hemocompatibility and increased thrombotic risk with functionalized tungsten disulfide nanotubes. These functionalized nanotubes should be used with caution in blood-contacting devices

Mots-clefs

Functional tungsten disulfide nanotubes; Hemocompatibility; Safety; Thrombin generation

Poor growth response during the first year of growth hormone treatment in short prepubertal children with growth hormone deficiency and born small for gestational age: a comparison of different criteria.

Straetemans S, Thomas M, Craen M, Rooman R, De Schepper J; BESPEED. **Mouraux T.**

Références	*Doi*	*IF*
Int J Pediatr Endocrinol. 2018;2018:9	*10.1186/s13633-018-0064-3*	*0,23*

Abstract

BACKGROUND:
There is no consensus on the definition of poor growth response after the first year of growth hormone (GH) treatment. We determined the proportion of poor responders identified by different criteria in children with GH deficiency (GHD) and born small for gestational age (SGA). The second aim was to analyze the IGF-1 response in poor growth responders.

METHODS:
First-year height data of 171 SGA and 122 GHD children who remained prepubertal during the first GH treatment year were retrieved from the BESPEED database and analyzed. Criteria for poor first-year response/responsiveness were: change in height (ΔHt) SDS<0.3 or<0.5, height velocity (HV) SDS<0.5 or <1 based on the population reference, HV SDS<-1 based on the KIGS expected HV curve (HV Ranke SDS), studentized residual (SR) <-1 in the KIGS first-year prediction model.

RESULTS:
ΔHt SDS<0.5 gave the highest percentage poor responders (37% SGA, 26% GHD). Although % poor responders were comparable for ΔHt SDS<0.3, HV SDS<+0.5, HV SDS<+1, SR<-1, and HV Ranke SDS<-1, these criteria did not always identify the same patients as poor responders. Among the poor growth responders 24% SGA and 14% GHD patients had an IGF-1 increase <40%.

CONCLUSIONS:
The different response criteria yield high but comparable percentages poor responders, but identify different patients. This study does not provide evidence that one criterion is better than another. A limited IGF-1 generation is not the major reason for a poor growth response in the first year of GH treatment in SGA and GHD children.

TRIAL REGISTRATION:
Retrospectively registered.

Mots-clefs

Children; First-year response; Growth hormone deficiency; Growth hormone treatment; Small for gestational age

Pulmonary veins isolation to retard pacemaker implantation.

Van der Haert L, Blommaert D.

Références	*Doi*	*IF*
Clin Case Rep. 2018 Oct 30;6(12):2445-2450	*10.1002/ccr3.1865*	

Abstract

Sick sinus syndrome is uncommon in children, and syndromic forms are rare. Some forms of sick sinus syndrome like the bradycardia-tachycardia type could be managed by a radiofrequency ablation, even in young children, and could be helpful to delay the implantation of a pacemaker

Mots-clefs

Mental retardation; pulmonary veins isolation; scoliosis; sick sinus syndrome; syndromic form

Comparing Effectiveness of Video-Assisted Oral Debriefing versus Oral Debriefing Alone During Human Resuscitation Simulation : A Randomized Trial

Horlait G, **Niemants J,** Gerard V, **Hanchard B,** Bihin B, **Sauvage R.**

Références	*Doi*	*IF*
Transl Biomed 2018;9(3)	*10.21767/2172-0479.100153*	*1,12*

Abstract

BACKGROUND: Evidence suggests that providing care for a disabled elderly person may have implications for the caregiver's own health (decreased immunity, hypertension, and depression).
OBJECTIVE: Explore if older spousal caregivers are at greater risks of frailty compared to older people without a load of care.
DESIGN: Case-control study.
SETTING: Participants were assessed at home in Wallonia, Belgium.
PARTICIPANTS: Cases: community-dwelling spousal caregivers of older patients, recruited mainly by the geriatric outpatient clinic.
CONTROLS: People living at home with an independent spouse at the functional and cognitive level matched for age, gender and comorbidities.
MEASUREMENTS: Mini nutritional assessment-short form (MNA-SF), short physical performance battery (SPPB), frailty phenotype (Fried), geriatric depression scale (GDS-15), clock drawing test, sleep quality, and medications. The multivariable analysis used a conditional logistic regression.
RESULTS: Among 79 caregivers, 42 were women; mean age and Charlson comorbidity index were 79.4±5.3 and 4.0±1.2, respectively. Among care-receivers (mean age 81.4±5.2), 82% had cognitive impairment. Caregiving was associated with a risk of frailty (Odd Ratio (OR) 6.66; 95% confidence interval (CI) 2.20-20.16), the consumption of antidepressants (OR 4.74; 95% CI 1.32 -17.01), shorter nights of sleep (OR 3.53; 95% CI 1.37-9.13) and more difficulties maintaining a social network (OR 5.25; 95% CI 1.68-16.40).
CONCLUSIONS: Spousal caregivers were at an increased risk of being frail, having shorter nights of sleep, taking antidepressants and having difficulties maintaining their social network, compared to non-caregiver controls. Older spousal caregivers deserve the full attention of professionals to prevent functional decline and anticipate a care breakdown

Mots-clefs

Medicine (miscellaneous)

Compliance and Outcome of Elderly Patients Treated in the Concurrent Once-Daily Versus Twice-Daily Radiotherapy (CONVERT) Trial.

Christodoulou M, Blackhall F, Mistry H, Leylek A, Knegjens J, **Remouchamps V**, Martel-Lafay I, Farré N, Zwitter M, Lerouge D, Pourel N, Janicot H, Scherpereel A, Tissing-Tan C, Peignaux K, Geets X, Konopa K, Faivre-Finn C.

Références	*Doi*	*IF*
J Thorac Oncol. 2019 Jan;14(1):63-71	*10.1016/j.jtho.2018.09.027*	*10,336*

Abstract

INTRODUCTION:
There is a lack of data on the efficacy and safety of concurrent chemoradiotherapy in elderly, limited-stage, patients with SCLC.

METHODS:
We compared outcomes of patients 70 years of age or older versus younger patients within the Concurrent Once-daily Versus twice-daily RadioTherapy (CONVERT) trial. Patients were randomized to receive 45 Gy/30 twice-daily fractions/19 days or 66 Gy/33 once-daily fractions/45 days concurrently with platinum-based chemotherapy. Overall survival and progression-free survival were evaluated using Kaplan-Meier methodology and Cox proportional hazards regression.

RESULTS:
Of 547 patients randomized between April 2008 and November 2013, 57 did not receive protocol treatment and were excluded. Of the 490 patients included, 67 (14%) were 70 years of age or older (median age: 73 years; range: 70-82). Fewer older patients received the optimal number of radiotherapy fractions (73% versus 85%; p = 0.03); however, chemotherapy compliance was similar in both groups (p = 0.24). Neutropenia grade 3/4 occurred more frequently in the elderly (84% versus 70%; p = 0.02) but rates of neutropenic sepsis (4% versus 7%; p = 0.07) and death (3% versus 1.4%; p = 0.67) were similar in both groups. With a median follow-up of 46 months; median survival in the elderly versus younger groups was 29 (95% confidence interval [CI]: 21-39) versus 30 months (95% CI: 26-35), respectively; (hazard ratio: 1.15, 95% CI: 0.84-1.59; p = 0.38). Median time to progression in the elderly versus younger groups was 18 months (95% CI: 13-31) versus 16 months (95% CI: 14-19), respectively (hazard ratio: 1.04, 95% CI: 0.76-1.41; p = 0.81).

CONCLUSIONS:
Concurrent chemoradiotherapy with modern radiotherapy techniques should be a treatment option for fit, older patients.

Mots-clefs

Chemotherapy; Elderly; Limited stage; Radiotherapy; SCLC

NOVEMBRE

Which treatment strategies for polyrefractory Neuro-Behçet disease?

London F, Hohenbichler K, Duprez T, Sindic C, van Pesch V.

Références	*Doi*	*IF*
Mult Scler Relat Disord. 2018 Nov 1;27:203-205	*10.1016/j.msard.2018.10.117*	*3,199*

Highlights

- The management of NBD is mainly based on observational data.
- TNF-alpha and IL-6 blockers are potential effective treatments in refractory NBD.
- Patients with refractory NBD may fail to anti-TNF-α and IL-6 blockers.
- Efficient alternative treatment options in refractory NBD are dramatically needed.

Mots-clefs

Transoral Robotic Surgery Total Laryngectomy.

Lawson G, Mendelsohn A, Fakhoury R, **Van der Vorst S, Remacle M, Bachy V, Delahaut G.**

Références	*Doi*	*IF*
ORL J Otorhinolaryngol Relat Spec. 2018;80(3-4):171-177	*10.1159/000490595*	*0.84*

Abstract

OBJECTIVE:
The aim of our study is to demonstrate our technique for performing transoral robotic surgical total laryngectomy (TORS-TL) with the use of the da Vinci robotic system.
MATERIALS AND METHODS:
We provide a comprehensive description of the TORS-TL operative techniques. Two fresh-frozen human cadavers were selected after ethics approval to describe the appropriate step-by-step surgical resection. We adopted a 5-step procedure that was later applied to 2 of our patients. The first patient presented initially with a squamous cell carcinoma (SCC) in the laryngeal glottis area. A lack of clinical response to initial treatment by chemoradiotherapy led to the decision of performing salvage TL surgery. The second patient had a previous history of head and neck SCC (HNSCC); he had no recurrence of his primary tumor but suffered significantly from postoperative breathing and swallowing difficulties due to severe laryngeal incompetence.
RESULTS:
TORS-TL was successfully performed in all cases. The operative time for the cadavers was approximately 65 and 55 min, respectively. It was significantly longer for the patients, 210 and 235 min, respectively, despite the fact that exactly the same steps were followed throughout all procedures. There were no intra- or postoperative complications or surgical morbidity related to the use of the da Vinci system.
CONCLUSION:
TORS-SL for SCC was performed in a safe, reliable, and smooth manner and was shown to be successful in treating our patients. We thus believe that our step-by-step surgical technique for TORS-SL is efficient and reproducible.

Mots-clefs

Procedure; Total laryngectomy; Transoral robotic surgery; da Vinci robot

Management of adult patients with anorexia nervosa: a literature review.

Jassogne C, Zdanowicz N.

Références	*Doi*	*IF*
Psychiatr Danub. 2018 Nov;30(Suppl 7):533-536		*1,341*

Abstract

BACKGROUND:
Anorexia is a frequent pathology; not only does it cause major changes in patients' quality of life, but also the mortality rate is high. This mortality mainly affects young people. However, care remains controversial. The aim of this literature review is, therefore, to review current guidelines.

SUBJECTS AND METHODS:
A review of the literature published between 2006 and 2017, from articles contained in the Cochrane, PubMed, Scopus and PsychINFO databases. Keywords were 'anorexia nervosa', 'adults' and 'management'.

RESULTS:
Patient management must be multidisciplinary and prioritise weight gain. For this to happen, outpatient monitoring must include a gradual normalisation of eating habits. This always involves psychotherapy and sometimes prescription medication. However, no specific therapy or psychotropic drug has demonstrated statistical superiority in the management of anorexic patients. Cognitive behavioural therapy remains the most effective therapy in preventing relapse, and family therapies for the treatment of young patients who are still living with their families of origin. Hospitalization is sometimes necessary and must then include gradual and closely monitored refeeding to avoid the potentially fatal refeeding syndrome.

CONCLUSIONS:
The management of anorexic patients is complex but always involves reaching a normal weight. The best prognosis is found in young patients with the least chronic disease.

Mots-clefs

«Please admire me!» When healthcare providers' positive stereotypes of asylum seeker patients contribute to better continuity of care.

Lepiéce B, Dubois T, Jacques D, Zdanowicz N.

Références	*Doi*	*IF*
Psychiatr Danub. 2018 Nov;30(Suppl 7):498-501		*1,341*

Abstract

BACKGROUND:
Among asylum seekers (AS), mental health conditions are highly prevalent. However this population group has poor access to adequate services and frequently incurs discontinuity of mental healthcare. Many factors explain discontinuity of mental healthcare for asylum seekers. The aim of this study is to evaluate if facilitation of care for AS decreases healthcare provider stereotypes of this population and improves their continuity of care.

SUBJECTS AND METHODS:
General practitioners (GPs) and mental health professionals (MHPs) were invited to participate in a vignette study, presenting an AS patient manifesting post-traumatic stress symptoms. We randomly manipulated the context of the clinical vignette to create two experimental conditions: facilitated care versus non-facilitated care. In each condition, we measured participants' stereotypes and continuity of care.

RESULTS:
There was a significant effect of participant's type of stereotypes on continuity of care ($F=2.87$, $p=0.035$). However, we found no effect of condition (facilitated vs. non facilitated care) on stereotypes ($F=0.11$, $p=0.95$), nor on continuity of care ($F=0.35$, $p=0.55$). Furthermore, there was a significant effect of profession (GPs vs MHPs) on continuity of care ($F=11.43$, $p=0.001$). Participants' number of consultations per week ($F=10.33$, $p=0.002$) and their gender ($F=3.69$, $p=0.030$) both have a significant effect on continuity of care.

CONCLUSION:
Among healthcare providers, we found that «admiration» stereotypes were associated more with continuity of care. Paradoxically, continuity of mental healthcare was better among GPs compared to MHPs. Thus, improvement of continuity of mental healthcare for AS among MHPs should be investigated in further studies.

Mots-clefs

Correlations between event-related potentials and NK cells, B and T lymphocytes.

Demont C, Zdanowicz N, Reynaert C, Denis J, Dubois T.

Références	*Doi*	*IF*
Psychiatr Danub. 2018 Nov;30(Suppl 7):475-478.		*1,341*

Abstract

BACKGROUND:
The links between psychiatry and immune dysfunctions are well known. By contrast, there are few studies that evaluate the link between neuroelectrophysiology and immune system disturbances.
SUBJECTS AND METHODS:
We retrospectively included 31 patients hospitalized between 2011 and 2012. They completed a sociodemographic questionnaire and were assessed using DSM IV TR on Axis 1. Event-related potentials were performed. Lymphocyte subtypes were quantified using flow cytometry.
RESULTS:
In terms of P300 latency, there are correlations with the absolute value of leukocytes: for P3a component, we find a correlation in frontal derivation Fz (r=0.405*), in central derivation Cz (r=0.438*), in parietal derivation Pz (r=0.403*) and for P3b component, there is a correlation in Fz (r=0.414*), in Cz (r=0.402*) and in Pz (r=0.425*). In terms of P300 amplitude, for P3b component, there are correlations with CD3 lymphocytes percentage in all derivations (Fz (r=-0.621**); Cz (r=-0.567**); Pz (r=-0.499**)) and with CD19 lymphocytes percentage in all derivations (Fz (r=0.469*); Cz (r=0.466*); Pz (r=0.430*)). For P3a, it is correlated with CD3 percentage (in Fz (r=-0.539**); Cz (r=-0.406*)) and with CD19 percentage (Fz (r=0.364*); Pz (r=0.357*)). With respect to the relationship between mismatch negativity (MMN) amplitude and natural killer (NK) cells percentage, there are correlations in left temporal derivation T3 (r=-0.426*), in Cz (r=-0.401*) and in right temporal derivation T4 (r=-0.427*). A correlation is found between the contingent negative variation (CNV) amplitude and the lymphocytes percentage in Fz (r=-0.471**).
CONCLUSIONS:
There is a link between lymphocyte-related immunity and electrophysiological disturbances in psychiatric patients. Further studies would be needed to evaluate this relationship more specifically, particularly prospectively and by pathology.

Mots-clefs

Immunity and psychiatric disorders: variabilities of immunity biomarkers are they specific?

Dubois T, Reynaert C, Jacques D, Lepiece B, Patigny P, Zdanowicz N.

Références	*Doi*	*IF*
Psychiatr Danub. 2018 Nov;30(Suppl 7):447-451		*1,341*

Abstract

BACKGROUND:
In previous studies we showed the interaction between depression and immunity. We observed that psychological stress seems to be important in this association. In this review we try to understand if psychological stress and immunity have similar or specific impact on the other psychiatric disorders. More generally we review literature to understand if specific immune alterations exist between the main psychiatric diagnoses.
METHOD:
We studied the literature in search of variabilities between the different psychiatric disorders in terms of immunity especially inflammation. We search on Pubmed, PsycINFO, PsycARTICLES and Sciencedirect articles with the keywords immunity or inflammation and depression, anxious disorders and schizophrenia.
RESULTS:
Prevalence of inflammation in psychiatric disorders seems to be between 21 to 42%. Psychiatric disorders are correlated with elevated levels of CRP, pro-inflammatory cytokines (IL-6, IL-1β and TNFα) and anti-inflammatory factors (TGF β, IL-10, sIL-2, IL-1RA). IL-6 in childhood were associated with subsequent risk of depression or psychotic disorders in early adulthood and in a dose dependent manner.
DISCUSSIONS:
We found similar immune processes through the different disorders. Variations in cytokines levels seem paralleling various stages of the illness and treatment. Inflammatory markers are linked with severity and resistance to treatment and with subsequent risk of disorders.
CONCLUSIONS:
Some inflammatory parameters could be considered as risk factor, severity, resistance, trait or state markers of a psychiatric disorder. Other studies are necessary to a better understanding of clinical implications of this heterogeneity.

Mots-clefs

Minimal information for studies of extracellular vesicles 2018 (MISEV2018): a position statement of the International Society for Extracellular Vesicles and update of the MISEV2014 guidelines.

Théry C, **Mullier F**, et al.

Références	*Doi*	*IF*
J Extracell Vesicles. 2018 Nov 23;7(1):1535750	*10.1080/20013078.2018.1535750*	

Abstract

The last decade has seen a sharp increase in the number of scientific publications describing physiological and pathological functions of extracellular vesicles (EVs), a collective term covering various subtypes of cell-released, membranous structures, called exosomes, microvesicles, microparticles, ectosomes, oncosomes, apoptotic bodies, and many other names. However, specific issues arise when working with these entities, whose size and amount often make them difficult to obtain as relatively pure preparations, and to characterize properly. The International Society for Extracellular Vesicles (ISEV) proposed Minimal Information for Studies of Extracellular Vesicles («MISEV») guidelines for the field in 2014. We now update these «MISEV2014» guidelines based on evolution of the collective knowledge in the last four years. An important point to consider is that ascribing a specific function to EVs in general, or to subtypes of EVs, requires reporting of specific information beyond mere description of function in a crude, potentially contaminated, and heterogeneous preparation. For example, claims that exosomes are endowed with exquisite and specific activities remain difficult to support experimentally, given our still limited knowledge of their specific molecular machineries of biogenesis and release, as compared with other biophysically similar EVs. The MISEV2018 guidelines include tables and outlines of suggested protocols and steps to follow to document specific EV-associated functional activities. Finally, a checklist is provided with summaries of key points.

Mots-clefs

Ectosomes; exosomes; extracellular vesicles; guidelines; microparticles; microvesicles; minimal information requirements; reproducibility; rigor; standardization

Effects of financial precariousness on mental health.

de Ruffi T, Zdanowicz N.

Références	*Doi*	*IF*
Psychiatr Danub. 2018 Nov;30(Suppl 7):439-442.		*1,341*

Abstract

BACKGROUND:
The physical and mental health of a population is based, in particular, on its quality of life and its access to health care. Given these determinants, Greece's population has greatly suffered due to the sharp cuts in the budget for social benefits and health care (some measurable evidence is the recent increase in the suicide rate). Starting January, the 1st of 2015, unemployment benefits in Belgium have been eliminated for all recipients who do not have a full-time year of work over the last three years. Therefore, we must ask whether there will be similar psycho-medical consequences for Belgium's population.
SUBJECTS AND METHODS:
Open study over a year (01/07/14 - 30/06/15) of emergencies admitted to the University Hospital Center of Mont-Godinne including a psychopathological motif. In addition to general socio-demographic data, psychic disorders are measured, as well as different types of crises (familial, professional or couple crisis), familial support and its dynamic (FACES III of Olson) and finally social integration (social isolation scale from the National Social Life, Health, and Aging Project (NSHAP)). These patients are compared with those admitted during the six months preceding the Act modifying the unemployment benefits.
RESULTS:
Between July the 1st of 2014 and June the 30th of 2015, we saw an increase in the number of admissions to the psychiatric emergency department by 2.5% in six months, despite a decrease in the number of admissions to all-cause emergencies. Our study also shows a degradation of social network quality characterized by a more pronounced social isolation of our patients. At last, an alteration of cohesion in the patient's origin family was highlighted.
CONCLUSION:
Although we cannot establish a direct causal link between this law and the results of this study, these may suggest a weakening of the population mental health due to difficult socio-economic context. As a result, we are faced not only with a public health problem but also with one concerning health care organization

Mots-clefs

Partial denial of pregnancy at 32 weeks in a diabetic and suicidal patient: A case report. What Are the Treatment Recommendations?

Jacques D, Maricq A, Dubois T, Lepiece B, Zdanowicz N, Delgrange E.

Références	*Doi*	*IF*
Psychiatr Danub. 2018 Nov;30(Suppl 7):418-421		*1,341*

Abstract

BACKGROUND:
Denial of pregnancy is an issue that is often discovered a posteriori with sometimes dramatic complications. Denial of pregnancy is considered partial when the woman becomes aware of the pregnancy after the fifth month before delivery. The populations studied were heterogeneous, which made it impossible to establish a standard algorithm of the treatment and support of a discovery of partial denial of pregnancy.
SUBJECTS AND METHODS:
Based on a literature review and a discussion of partial denial of pregnancy case and the consequential treatment with a five-year follow-up, the global management recommendations need consideration in the case of partial denial of pregnancy.
RESULTS:
The reported case confirmed the significance of the trauma caused by the discovery of pregnancy in a patient in denial, but also showed that this trauma can extend to caregivers concerned by the treatment.
CONCLUSION:
Continuous training of all caregivers for denial of pregnancy is essential even if the issue may be considered infrequent. Contraception, prevention of sexually transmitted diseases and the importance of gynecological follow-up must be systematically addressed in a medical consultation. A standard algorithm for the treatment of partial denial is difficult to establish, but the rapid mobilization of a multidisciplinary team or hospitalization is recommended for the announcement of the diagnosis as well as personalized support during ultrasounds. The establishment of a relationship of trust remains the major issue

Mots-clefs

How should psychiatrists and general physician communicate to increase patients' perception of continuity of care after their hospitalization for alcohol withdrawal?

Patigny P, Zdanowicz N, Lepiece B

Références	*Doi*	*IF*
Psychiatr Danub. 2018 Nov;30(Suppl 7):409-411		*1,341*

Abstract

BACKGROUND:
There are medico-psycho-social indications to apprehend the alcohol use disorder (AUD) as a chronic problem for which a continuous care is necessary. The perception of continuity of care is also associated with positive outcomes on the patient's health. Communication between caregivers is essential to maintain a good continual care. In order to put patients back into the center of care, we asked them the question: «why should the psychiatric department (PD) and general physicians (GP) should communicate about AUD patients»?

SUBJECTS AND METHODS:
After a week of hospitalization for alcoholic withdrawal, we used a qualitative approach with 4 open questions to explore AUD patients' point of view (N=17) about the best way of communication between psychiatrists and GP to improve care continuity. The data collection was carried out in the psychiatric department of the University Hospital of Mont-Godinne, Belgium.

RESULTS:
AUD patients consider that the GP is the first line actor that will be consulted after hospitalization and have a privileged relationship with him. These arguments justify him being informed. Concerning these patients, communication is useful to have a continuous treatment and project care, for purposes of symptoms' evolution follow-up and so as to help the GP to understand them better to follow the evolution of symptoms and to help the GP to understand them better.

CONCLUSION:
From AUD patients' point of view, communication between psychiatric department and the GP is useful for a perspective of continuity of care at discharge from the hospital. This communication seems to be at the service of the GP and his patient rather than for the psychiatrist himself. Mainly because of the GP's role as a privileged first-line care, but also thanks to the specific relationship relating him to his patient.

Mots-clefs

Depression and physical health, the therapeutic alliance and antidepressants.

Zdanowicz N, Reynaert C, Jacques D, Lepiece B, Godenir F, Pivont V, Dubois T.

Références	*Doi*	*IF*
Psychiatr Danub. 2018 Nov;30(Suppl 7):401-404		*1,341*

Abstract

BACKGROUND:
In a two-year study we compared the efficacy of noradrenergic (duloxetine D) and serotonergic (escitalopram E) antidepressants with and without the addition of 100 mg acetylsalicylic acid (ASA) in subjects suffering from a major depressive episode (MDE). The results showed that the D + ASA (DASA) group improved more rapidly than the E + placebo (EP) subgroup. In particular, Hamilton Depression Scale (HDS) scores improved as early as two months, Clinical Global Impression (CGI) scores improved at five months, and remission rates were better. In the course of this study, we also investigated the role of the therapeutic relationship (alliance) on both the progress of the MDE, and patients' mental and physical health.

SUBJECTS AND METHODS:
40 people suffering from an MDE were randomly assigned to treatment groups. At the beginning of the study sociodemographic data were collected, and the Helping Alliance Questionnaire (HAQ) was completed. During the study, patients were regularly assessed using the HDS, CGI and the Short Form Health Survey (SF-12).

RESULTS:
Subgroup comparisons revealed that HAQ scores are not correlated with HAD scores, but a correlation was found with remission rates ($r=0.316^*$). Similarly, at all times, HAQ scores were correlated with physical health ($p<0.05$), which is in turn correlated with HDS and CGI scores.

CONCLUSION:
Physical health is linked to the level of depression. While the alliance with the patient is not directly correlated with the intensity of depression, is it correlated with their physical condition and its improvement. For patients, improving their physical health appears to be more important than improving their mental health. These observations must be confirmed.

Mots-clefs

Bacteremia; Direct identification; MALDI-TOF MS; Polymicrobial blood culture

Why do cyberbullied adolescents stay in contact with their harasser? A Literature Review and Reflection on Cyberbullied Adolescents' Coping Strategies.

Khatcherian E, Zdanowicz N

Références	*Doi*	*IF*
Psychiatr Danub. 2018 Nov;30(Suppl 7):537-540		*1,341*

Abstract

BACKGROUND:
Many young patients who are cyberbullied maintain communication with their harasser, despite the fact that this behaviour perpetuates the harassment. Numerous studies describe coping strategies adopted by cyberbullied adolescents. None describe what motivates adolescents to continue to communicate with their harassers.
METHODS:
We conducted a literature review of cyberbullying, taking into account the challenges of adolescence. We used several search engines (Scopus, PsycINFO, Cairn and PubMed), using the following keywords: cyberbullying, teens, behaviour, coping strategies, social network, Facebook, counterpart. Our search returned 526 results, which were subsequently sorted as a function of their relevance. We also consulted reference books on adolescent psychology.
RESULTS:
The adolescent, whose identity is being rebuilt, seeks a peer group, but also a relationship with a counterpart. This search is replayed on social networks and can lead adolescents to meet a counterpart harasser. Studies show that adolescents who suffer from cyberbullying are more likely than others to be in search of new friendships, and use social networks to make up for a lack or absence of fulfilling social relationships. They have fewer friends, have more difficulty maintaining social ties, and have fewer communication skills. In addition, cyberbullied adolescents have poorer relationships with their parents and teachers than their peers.
CONCLUSIONS:
Narcissistically fragile adolescents are at greater risk of being unable to stop communicating with their cyberbully. If the adolescent has no other relationships that enable him or her to develop their identity, they will be unable to put an end to this harmful counterpart relationship. It would be interesting to supplement this review with an experimental study, and to consider the development of new, secondary prevention strategies in the adolescent population

Mots-clefs

Rivaroxaban plasma levels in patients admitted for bleeding events: insights from a prospective study.

Sennesael AL, **Larock AS**, Douxfils J, Elens L, Stillemans G, Wiesen M, Taubert M, Dogné JM, **Spinewine A**, **Mullier F**.

Références	*Doi*	*IF*
Psychiatr Danub. 2018 Nov;30(Suppl 7):401-404		*3,90*

Abstract

BACKGROUND:
Serious bleeding events have been frequently described in patients taking direct oral anticoagulants (DOAC). In secondary analyses of phase 3 trials, DOAC plasma concentrations were shown to correlate with bleeding outcomes. This study aimed to describe rivaroxaban plasma levels in patients admitted to the emergency department (ED) for bleeding events. For each patient, risk factors for experiencing bleeding events were also investigated.

METHODS:
This analysis was part of an observational study conducted in the ED of two teaching hospitals. Plasma samples from 10 rivaroxaban-treated patients admitted for bleeding events were collected. Rivaroxaban plasma concentrations were determined by calibrated chromogenic anti-Xa assay. The measured rivaroxaban levels were then extrapolated at trough using a published population pharmacokinetic (PopPK) model, and compared to on-therapy ranges observed in large clinical trials. For each patient, clinical, medication and ABCB1 genotype data were collected.

RESULTS:
Rivaroxaban measurements varied from 5 to 358 ng/ml, with a post-intake delay ranging from 9 to 38 h. At trough, estimated plasma concentrations were between 12 and 251 ng/ml (median value 94 ng/ml). Four patients had higher-than-expected rivaroxaban levels. Inadequate dose regimen, excessive alcohol consumption and lack of treatment reassessment were observed in several patients. Half of patients were taking ≥1 drug with potential pharmacokinetics interactions (e.g. amiodarone, diltiazem), while half of patients were taking ≥1 drug increasing the risk of bleeding. All 3 patients with available genotyping data and higher-than-expected rivaroxaban levels were heterozygous or homozygous mutated for the ABCB1 1236C›T, 2677G›T, 3435 C›T and rs4148738 single nucleotide polymorphisms (SNP).

CONCLUSIONS:
Rivaroxaban patients admitted to the ED for bleeding events showed highly variable plasma concentrations. This analysis underlines the usefulness of rapid DOAC measurement and the value of PopPK models to estimate concentrations at trough in a context where the post-intake delay is unmanageable. Close patient follow-up, including renal function assessment and drug interactions review, is essential for bleeding risk minimization.

Mots-clefs

Bleeding; Direct oral anticoagulants; Drug monitoring; Patient safety; Pharmacogenomics; Rivaroxaban

Factors Associated with the Caregivers' Desire to Institutionalize Persons with Dementia: A Cross-Sectional Study.

Vandepitte S, Putman K, Van Den Noortgate N, Verhaeghe S, **Mormont E**, Van Wilder L, De Smedt D, Annemans L

Références	*Doi*	*IF*
Dement Geriatr Cogn Disord. 2018 Nov 19;46(5-6):298-309	*10.1159/000494023*	*2,886*

Abstract

BACKGROUND/AIMS:
Dementia is one of the main reasons for institutionalization among the elderly. Few studies have explored factors associated with the caregivers' (CG) desire to institutionalize (DTI) a person with dementia (PWD). The objective of this study is to identify modifiable and non-modifiable psychosocial and sociodemographic factors associated with a caregiver's DTI.

METHODS:
Cross-sectional data of 355 informal CG of community-dwelling PWD were analyzed. Several characteristics were identified in CG and PWD to be included in a multivariable regression model based on the purposeful selection method.

RESULTS:
Positively modifiable associated factors were: higher CG burden, being affected by behavioral problems, and respite care use. Positively associated non-modifiable factors were: CG older age, being professionally active, and CG higher educational level. Cohabitation and change of professional situation were negatively associated.

CONCLUSION:
Although no causality can be assumed, several practical recommendations can be suggested. First of all, these results reconfirm the importance of multicomponent strategies, especially support aimed at decreasing burden and in learning coping strategies. Also, CG might benefit from information about support options, such as respite care services. Finally, special attention should be given to older and working CG. In the latter, flexible and adaptive working conditions might alleviate burden and therefore reduce the DTI of the PWD

Mots-clefs

Alzheimer; Informal care; Institutionalization

Minimal information for studies of extracellular vesicles 2018 (MISEV2018) : a position statement of the International Society for Extracellular Vesicles and Update of the MISEV2014 guidelines

Thery C, **Mullier F**, et al.

Références	*Doi*	*IF*
J Extracel Ves, 2018 ;7(1) :1535750	*10.1080/20013078.2018.1535750*	

Abstract

The last decade has seen a sharp increase in the number of scientific publications describing physiological and pathological functions of extracellular vesicles (EVs), a collective term covering various subtypes of cell-released, membranous structures, called exosomes, microvesicles, microparticles, ectosomes, oncosomes, apoptotic bodies, andmany other names. However, specific issues arise when working with these entities, whose size and amount often make them difficult to obtain as relatively pure preparations, and to characterize properly. The International Society for Extracellular Vesicles (ISEV) proposed Minimal Information for Studies of Extracellular Vesicles ("MISEV") guidelines for the field in 2014. We now update these "MISEV2014" guidelines based on evolution of the collective knowledge in the last four years. An important point to consider is that ascribing a specific function to EVs in general, or to subtypes of EVs, requires reporting of specific information beyond mere description of function in a crude, potentially contaminated, and heterogeneous preparation. For example, claims that exosomes are endowed with exquisite and specific activities remain difficult to support experimentally, given our still limited knowledge of their specific molecular machineries of biogenesis and release, as compared with other biophysically similar EVs. The MISEV2018 guidelines include tables and outlines of suggested protocols and steps to follow to document specific EV-associated functional activities. Finally, a checklist is provided with summaries of key points.

Mots-clefs

Evaluation of the ePlex Blood Culture Identification Panels for Detection of Pathogens in Bloodstream Infections.

Huang TD, Melnik E, Bogaerts P, Evrard S, Glupczynski Y.

Références	*Doi*	*IF*
J Clin Microbiol. 2018 Nov 28. pii: JCM.01597-18	*10.1128/JCM.01597-18*	*4,054*

Abstract

Rapid identification and susceptibility testing results are of importance for the early appropriate therapy of bloodstream infections. The ePlex (GenMark Diagnostics) Blood Culture Identification (BCID) Panels are fully automated PCR-based assays designed to identify Gram-positive, Gram-negative bacteria, fungi and bacterial resistance genes within 1.5 hours from positive blood culture. Consecutive non-duplicate positive blood culture episodes were tested by the ePlex system prospectively. The choice of panel(s) (Gram-positive/Gram-negative/fungal pathogens) was defined by Gram-stained microscopy of BC+ bottles (BactAlert, bioMérieux). Results with the ePlex panels were compared to the identification results obtained by standard culture-based workflow.
In total, 216 positive blood culture episodes were evaluable yielding 263 identification results. The sensitivity/positive predictive value for detection by the ePlex panels of targeted cultured isolates were of 97%/99% for the Gram-positive panel and of 99%/96% for the Gram-negative panel, resulting in overall agreement rates of 96% and 94% for the Gram-positive and Gram-negative panel, respectively. All 26 samples with targeted resistance results were correctly detected by the ePlex panels. The ePlex panels provided highly accurate results and proved to be an excellent diagnostic tool for the rapid identification of pathogens causing bloodstream infections. The short time to results may be of added value for optimizing the clinical management of patients with sepsis.

Mots-clefs

Therapeutic recommendations for early stage Hodgkin lymphomas.

Depaus J, Delcourt A**, André M.**

Références	*Doi*	*IF*
Br J Haematol. 2019 Jan;184(1):9-16.	*10.1111/bjh.15623*	*5,128*

Abstract

Combined modality treatment has been the standard option for the treatment of early stage Hodgkin lymphoma for several decades. Because of the high success rate and the risk of late toxicities, recent clinical trials have focused on reducing the treatment burden. Field and dose of radiotherapy, and number of cycles of chemotherapy have been successfully reduced, particularly for favourable early stage patients. However, the impact of these treatment reductions on the rate of secondary malignancies remains still unclear. Positron emission tomography-computed tomography (PET-CT) scanning has emerged as a very important tool for disease staging and end of treatment assessment. Interestingly, a PET performed after 2 cycles of ABVD (adriamycin, bleomycin, vinblastine, dacarbazine) has been correlated with final outcome and was recently evaluated in a randomized clinical trial to evaluate individualized therapy based on PET response after 2 or 3 cycles of ABVD. These trials aimed to identify good prognosis (early PET-negative) patients who could be spared radiotherapy, but also patients with a bad prognosis (early PET-positive) who need more intensive treatment. More recently, new drugs, such as brentuximab vedotin and checkpoint inhibitors, have shown efficacy in relapsed/refractory patients and are currently under evaluation in early stage patients.

Mots-clefs

Hodgkin lymphoma; modality treatment; radiotherapy

Reverse takotsubo cardiomyopathy triggered by a multiple sclerosis relapse.

London F, Gonzalez Rodriguez de Azero N, Philippart M, Higny J, Mulquin N

Références	*Doi*	*IF*
Acta Neurol Belg. 2018 Nov 30	*10.1007/s13760-018-1056-z*	*2,072*

Abstract

Mots-clefs
Heart failure; MRI; Medulla oblongata; Multiple sclerosis; Takotsubo

Percutaneous portal vein recanalization using self-expandable nitinol stents in patients with non-cirrhotic non-tumoral portal vein occlusion.

Marot A, Barbosa JV, Duran R, Deltenre P, Denys A.

Références	*Doi*	*IF*
Diagn Interv Imaging. 2018 Nov 28. pii: S2211-5684(18)30227-4	*10.1016/j.diii.2018.07.009*	*1,93*

Abstract

PURPOSE:

The purpose of this study was to evaluate the feasibility, safety, and efficacy of portal vein recanalization (PVR) and propose a new classification for better selecting candidates with portal vein occlusion (PVO) in whom PVR could be feasible.

MATERIALS AND METHODS:

The charts of 15 non-cirrhotic patients in whom stent placement using a trans-hepatic approach was attempted for the treatment of PVO with cavernous transformation were reviewed. There were 12 men and 5 women with a mean age of 47±12 years (range: 22-60 years). Intrahepatic involvement was classified into 3 groups according to the intrahepatic extent of PVO: type 1 included occlusions limited to the origin of the main portal vein and/or the right or left portal branches, type 2 included type 1 plus extension to the origin of segmental branches, type 3 included type 2 plus extension to distal branches.

RESULTS:

There were 6 patients with PVO type 1, 7 patients with PVO type 2, and 2 patients with PVO type 3. Indications for PVR were gastrointestinal bleeding (n=6), portal biliopathy (n=2), reduce portal pressure before surgery (n=4), or other (n=3). PVR was successful in 13 patients (87%) with no severe side effects. Failure of PVR or early stent thrombosis occurred in 100% of type 3 vs. 8% of type 1 and 2 patients (P=0.03). During a mean follow-up of 42±28 months (range: 6-112 months), patients with a permeable stent had resolution of portal hypertension-related manifestations. In 13 patients in whom PVR was feasible, stent permeability was 77% at 2 years (87% vs. 60% in patients who received anticoagulation or not, respectively; P=0.3).

CONCLUSION:

PVR is feasible in most patients with non-cirrhotic, non-tumoral portal vein occlusion when there is no extension of the occlusion to distal branches

Mots-clefs

Portal hypertension; Portal vein occlusion; Portal vein recanalization

BSR Annual Meeting 2018: Interventional Radiology.

Deprez FC, De Beule T.

Références	*Doi*	*IF*
J Belg Soc Radiol. 2018 Nov 17;102(Suppl 1):3	*10.5334/jbsr.1672*	*0,270*

Abstract

Mots-clefs

Risk profiles and one-year outcomes of patients with newly diagnosed atrial fibrillation in India: Insights from the GARFIELD-AF Registry.

Sawhney JP, Kothiwale VA, Bisne V, Durgaprasad R, Jadhav P, Chopda M, Vanajakshamma V, Meena R, Vijayaraghavan G, Chawla K, Allu J, Pieper KS, John Camm A, Kakkar AK; GARFIELD-AF Investigators.

Références	*Doi*	*IF*
Indian Heart J. 2018 Nov - Dec;70(6):828-835	*10.1016/j.ihj.2018.09.001*	*0,61*

Abstract

BACKGROUND:

The Global Anticoagulant Registry in the FIELD-Atrial Fibrillation (GARFIELD-AF) is an ongoing prospective noninterventional registry, which is providing important information on the baseline characteristics, treatment patterns, and 1-year outcomes in patients with newly diagnosed non-valvular atrial fibrillation (NVAF). This report describes data from Indian patients recruited in this registry.

METHODS AND RESULTS:

A total of 52,014 patients with newly diagnosed AF were enrolled globally; of these, 1388 patients were recruited from 26 sites within India (2012-2016). In India, the mean age was 65.8 years at diagnosis of NVAF. Hypertension was the most prevalent risk factor for AF, present in 68.5% of patients from India and in 76.3% of patients globally (P < 0.001). Diabetes and coronary artery disease (CAD) were prevalent in 36.2% and 28.1% of patients as compared with global prevalence of 22.2% and 21.6%, respectively (P < 0.001 for both). Antiplatelet therapy was the most common antithrombotic treatment in India. With increasing stroke risk, however, patients were more likely to receive oral anticoagulant therapy [mainly vitamin K antagonist (VKA)], but average international normalized ratio (INR) was lower among Indian patients [median INR value 1.6 (interquartile range {IQR}: 1.3-2.3) versus 2.3 (IQR 1.8-2.8) (P < 0.001)]. Compared with other countries, patients from India had markedly higher rates of all-cause mortality [7.68 per 100 person-years (95% confidence interval 6.32-9.35) vs 4.34 (4.16-4.53), P < 0.0001], while rates of stroke/systemic embolism and major bleeding were lower after 1 year of follow-up.

CONCLUSION:

Compared to previously published registries from India, the GARFIELD-AF registry describes clinical profiles and outcomes in Indian patients with AF of a different etiology. The registry data show that compared to the rest of the world, Indian AF patients are younger in age and have more diabetes and CAD. Patients with a higher stroke risk are more likely to receive anticoagulation therapy with VKA but are underdosed compared with the global average in the GARFIELD-AF. CLINICAL TRIAL REGISTRATION-URL: http://www.clinicaltrials.gov. Unique identifier: NCT01090362.

Mots-clefs

Anticoagulant therapy; Arrhythmia; Atrial fibrillation; GARFIELD-AF

Ultrasound anatomy of the normal stifle in the sheep.

Kayser F, Hontoir F, Clegg P, Kirschvink N, Dugdale A, Vandeweerd JM.

Références	*Doi*	*IF*
Anat Histol Embryol. 2018 Nov 22	*10.1111/ahe.12414*	*0,731*

Abstract

Though the ovine stifle is commonly used as a model in research, there is no description of its anatomy at ultrasonography (US). The objective of this study was to provide reference US images of the ovine stifle that are relevant in musculoskeletal research. Four pairs of hindlimbs were scanned, whilst four other pairs were frozen and cut in different planes to compare gross anatomy to US scans. In another pair, the synovial compartments of the stifle were injected and scanned. This study demonstrated that US could be used to assess the ovine stifle. Several structures of clinical interest could be identified with cranial, lateral and medial approaches, such as (a) the tendons of m. quadriceps femoris, m. gluteobiceps, m. popliteus, (b) the common tendon of m. peroneus tertius-extensor longus digitorum-extensor digiti III proprius, (c) the patellar ligament, (d) the medial and lateral collateral ligaments, (e) the cranial horn and middle segment of medial and lateral meniscus, and (f) the synovial recesses. However, the caudal approach was not successful to identify caudal anatomical structures of the joint, due to the muscular mass, that is the caudal aspects of the articular surfaces of the femoral and tibial condyles, the caudal horns of the menisci and the supracondylar synovial recesses. In addition, US remained challenging to assess the internal structures such as cruciate ligaments and articular surfaces. The feasibility of US needs to be tested in vivo.

Mots-clefs

Animal model; ovine; sheep; stifle; ultrasound

Baseline clinical characteristics, comorbidities and prescribed medication in a real-world population of patients with idiopathic pulmonary fibrosis: the PROOF registry.

Wuyts WA, **Dahlqvist C**, Slabbynck H, Schlesser M, Gusbin N, Compere C, Maddens S, Kirchgaessler KU, Bartley K, Bondue B.

Références	*Doi*	*IF*
BMJ Open Respir Res. 2018 Nov 21;5(1):e000331	*10.1136/bmjresp-2018-000331*	*2,97*

Abstract

INTRODUCTION:
PROOF (a Prospective Observational Registry to Describe the Disease Course and Outcomes of Idiopathic Pulmonary Fibrosis) is an ongoing, observational registry initiated in 2013 with the aim of collecting real-world data from patients with idiopathic pulmonary fibrosis (IPF). Here, we present comprehensive baseline data, which were collected from patients on registry inclusion.

METHODS:
Patients with IPF were enrolled across eight centres in Belgium and Luxembourg. Baseline data collected included demographics, diagnostic information and clinical characteristics, including lung function and health-related quality of life. Data on comorbidities and prescribed medication were also collected.

RESULTS:
A total of 277 patients were enrolled in the PROOF registry. At inclusion, 92.8% and 6.5% of patients had a definite or probable diagnosis of IPF, respectively. Mean per cent predicted forced vital capacity and carbon monoxide diffusing capacity were 80.6% and 46.9%, respectively. Mean St. George's Respiratory Questionnaire total score was 47.0, and mean Cough-Visual Analogue Scale score was 30.5 mm. The most prevalent comorbidities reported at inclusion were gastrointestinal disorders (50.2%), including gastro-oesophageal reflux disease (47.3%) and metabolism and nutrition disorders (39.7%). At inclusion, 67.2% and 2.2% of patients were prescribed pirfenidone and nintedanib, respectively, with treatment initiated either prior to, or at the time of, inclusion. Medication prescribed concomitantly with pirfenidone included antihypertensives (54.8%), statins (37.1%) and prophylactic antithrombotics/anticoagulants (36.6%).

CONCLUSION:
The PROOF registry provides valuable demographic and clinical data from a real-world population of patients with IPF in Belgium and Luxembourg, demonstrating the high burden of comorbidities and prescribed medication in these patients. Longitudinal data from this patient population will be investigated in future analyses.

TRIAL REGISTRATION:
PROOF is registered with the relevant authorities in Belgium and Luxembourg, with registration to Comité National d'Éthique et de Recherché (CNER) N201309/03 - 12 September 2013 and a notification to Comité National de Protection des Données (CNDP).

Mots-clefs

interstitial fibrosis; rare lung diseases

Sex-Related Differences in Lactotroph Tumor Aggressiveness Are Associated With a Specific Gene-Expression Signature and Genome Instability.

Wierinckx A, **Delgrange E,** Bertolino P, François P, Chanson P, Jouanneau E, Lachuer J, Trouillas J, Raverot G.

Références	*Doi*	*IF*
Front Endocrinol (Lausanne). 2018 Nov 30;9:706	*10.3389/fendo.2018.00706*	*4,48*

Abstract

Sex-related differences have been reported in various cancers, in particular men with lactotroph tumors have a worse prognosis than women. While the underlying mechanism of this sexual dimorphism remains unclear, it has been suggested that a lower estrogen receptor alpha expression may drive the sex differences observed in aggressive and malignant lactotroph tumors that are resistant to dopamine agonists. Based on this observation, we aimed to explore the molecular importance of the estrogen pathway through a detailed analysis of the transcriptomic profile of lactotroph tumors from 20 men and 10 women. We undertook gene expression analysis of the selected lactotroph tumors following their pathological grading using the five-tiered classification. Chromosomic alterations were further determined in 13 tumors. Functional analysis showed that there were differences between tumors from men and women in gene signatures associated with cell morphology, cell growth, cell proliferation, development, and cell movement. Hundred-forty genes showed an increased or decreased expression with a minimum 2-fold change. A large subset of those genes belonged to the estrogen receptor signaling pathway, therefore confirming the potent role of this pathway in lactotroph tumor sex-associated aggressiveness. Genes belonging to the X chromosome, such as CTAG2, FGF13, and VEGF-D, were identified as appealing candidates with a sex-linked dysregulation in lactotroph tumors. Through our comparative genomic hybridization analyses (CGH), chromosomic gain, in particular chromosome 19p, was found only in tumors from men, while deletion of chromosome 11 was sex-independent, as it was found in most (5/6) of the aggressive and malignant tumors. Comparison of transcriptomic and CGH analysis revealed four genes (CRB3, FAM138F, MATK, and STAP2) located on gained regions of chromosome 19 and upregulated in lactotroph tumors from men. MATK and STAP2 are both implicated in cell growth and are reported to be associated with the estrogen signaling pathway. Our work confirms the proposed involvement of the estrogen signaling pathway in favoring the increased aggressiveness of lactotroph tumors in men. More importantly, we highlight a number of ER-related candidate genes and further identify a series of target molecules with sex-specific expression that could contribute to the aggressive behavior of lactotroph tumors in men.

Mots-clefs

Aggressiveness; chromosome; estrogen signaling; gene expression; pituitary tumors; sexual dimorphism

Assessment of Left Ventricular Reverse Remodeling by Cardiac MRI in Patients Undergoing Repair Surgery for Severe Aortic or Mitral Regurgitation.

Seldrum S, de Meester C, Pierard S, Pasquet A, Lazam S, Boulif J, Vanoverschelde JL, Gerber BL.

Références	*Doi*	*IF*
J Cardiothorac Vasc Anesth. 2018 Nov 14. pii: S1053-0770(18)31030-9	*10.1053/j.jvca.2018.11.013*	*1,574*

Abstract

OBJECTIVE:
To evaluate left ventricular (LV) reverse remodeling after repair surgery for mitral regurgitation (MR) or aortic regurgitation (AR), aiming at determining optimal preoperative thresholds for normalization of LV volumes and function after surgery.
DESIGN: Observational prospective cohort study.
SETTING:
Single-center, academic, tertiary care cardiovascular center.
PARTICIPANTS: Patients and volunteers.
INTERVENTIONS:
Cardiac magnetic resonance with measurement of indexed LV end-diastolic volume (LVEDVi) and end-systolic volume (LVESVi), mass (LVmassi), and ejection fraction (LVEF) was performed preoperatively and postoperatively.
MEASUREMENTS AND MAIN RESULTS:
The authors included 29 patients with AR and 59 patients with MR (46 ± 12 and 56 ± 12 years, follow-up 222 ± 57 days). Both AR and MR repair resulted in a significant reduction of LV volumes and mass (respectively, delta change in LVEDVi -55 mL/m² and -43 mL/m²; in LVESVi -26 mL/m² and -10 mL/m²; and in LVmassi -24 g/m² and -12 g/m²; $p < 0.001$ for all). Yet despite the absence of perioperative necrosis, 7 (24%) patients with AR had persistent LV dilatation (LVEDVi >106 mL/m²) relative to controls and 16 (27%) patients with MR developed systolic LV dysfunction (LVEF <50%) postoperatively. Binary logistic regression analysis indicated preoperative LV volumes as the most accurate parameter for predicting both incomplete LV reverse remodeling in AR and LV dysfunction in MR. Receiver operating characteristic-determined thresholds were LVEDVi >155 mL/m² for AR and >129 mL/m² for MR.
CONCLUSION:
Although both AR and MR repair allow significant reverse postoperative LV remodeling, persistent LV dilatation after AR correction and systolic LV dysfunction after MR repair are common and best predicted by increased preoperative LV volumes. This highlights the importance of considering LV volumes in the decision-making process.

Mots-clefs

cardiac magnetic resonance; myocardial remodeling; valvular heart disease

Distribution of ABO and RHD blood group antigens in blood donors in Burkina Faso.

Sawadogo S, Nebie K, Millogo T, Kafando E, Sawadogo AG, Dahourou H, Traore F, Ouattara S, Ouedraogo O, Kienou K, Dieudonné YY, **Deneys V.**

Références	*Doi*	*IF*
Int J Immunogenet. 2019 Feb;46(1):1-6.	*10.1111/iji.12408*	*1*

Abstract

Geographical distribution of ABO and RHD antigens is important for blood transfusion services and population genetics studies. There are few data on this topic in Burkina Faso, a multi-ethnic country. Our study aims at reporting phenotypic and allelic frequencies of ABO and RHD blood groups among voluntary blood donors from various ethnical regions of Burkina Faso. We conducted a cross-sectional study including 81,486 blood donors. ABO allelic frequencies were determined using the Bernstein method. Differences in phenotypic distribution of blood groups were assessed using the chi-square test; a p value ‹0.05 being considered as statistically significant. We noticed that O+›B+›A+›AB+›O-›B-›A-›AB- in our population. Phenotypic frequencies of blood groups A, B, O and AB were respectively 22.54%, 28.56%, 43.30% and 5.60%. RHD+was 92.24%. The allelic frequencies of A, B, O and D were respectively 0.1524; 0.1887; 0.6590 and 0.7214. We noticed statistical differences (p ‹ 0.05) between these administrative regions which corresponded roughly to some natural ethnic areas. Indeed, the phenotype O was more frequent in the Central-west, Central and East regions corresponding to «Mossi,» «Gourounsi,» «Gourmantché» areas while the phenotype A and AB were more reported in «Boucle du mouhoun» and «Hauts-Bassins» regions where we have «Bwaba» and «Bobo.» The phenotype O negative was less frequent in «Bwaba.» Our study provides interesting information to blood services that will allow them to better refine their donor recruitment strategies.

Mots-clefs

Outcomes of Patients Presenting with Mild Acute Respiratory Distress Syndrome: Insights from the LUNG SAFE Study

Pham T, Serpa Neto A, Pelosi P, Laffey JG, De Haro C, Lorente JA, Bellani G, Fan E, Brochard LJ, Pesenti A, Schultz MJ, Artigas A; LUNG SAFE Investigators and the European Society of Intensive Care Medicine Trials Group. **Dive A, Bulpa P.**

Références	*Doi*	*IF*
Anesthesiology. 2018 Nov 27	*10.1097/ALN.0000000000002508*	*6,523*

Abstract

WHAT WE ALREADY KNOW ABOUT THIS TOPIC:

WHAT THIS ARTICLE TELLS US THAT IS NEW: BACKGROUND:: Patients with initial mild acute respiratory distress syndrome are often underrecognized and mistakenly considered to have low disease severity and favorable outcomes. They represent a relatively poorly characterized population that was only classified as having acute respiratory distress syndrome in the most recent definition. Our primary objective was to describe the natural course and the factors associated with worsening and mortality in this population.

METHODS:

This study analyzed patients from the international prospective Large Observational Study to Understand the Global Impact of Severe Acute Respiratory Failure (LUNG SAFE) who had initial mild acute respiratory distress syndrome in the first day of inclusion. This study defined three groups based on the evolution of severity in the first week: «worsening» if moderate or severe acute respiratory distress syndrome criteria were met, «persisting» if mild acute respiratory distress syndrome criteria were the most severe category, and «improving» if patients did not fulfill acute respiratory distress syndrome criteria any more from day 2.

RESULTS:

Among 580 patients with initial mild acute respiratory distress syndrome, 18% (103 of 580) continuously improved, 36% (210 of 580) had persisting mild acute respiratory distress syndrome, and 46% (267 of 580) worsened in the first week after acute respiratory distress syndrome onset. Global in-hospital mortality was 30% (172 of 576; specifically 10% [10 of 101], 30% [63 of 210], and 37% [99 of 265] for patients with improving, persisting, and worsening acute respiratory distress syndrome, respectively), and the median (interquartile range) duration of mechanical ventilation was 7 (4, 14) days (specifically 3 [2, 5], 7 [4, 14], and 11 [6, 18] days for patients with improving, persisting, and worsening acute respiratory distress syndrome, respectively). Admissions for trauma or pneumonia, higher nonpulmonary sequential organ failure assessment score, lower partial pressure of alveolar oxygen/fraction of inspired oxygen, and higher peak inspiratory pressure were independently associated with worsening.

CONCLUSIONS:

Most patients with initial mild acute respiratory distress syndrome continue to fulfill acute respiratory distress syndrome criteria in the first week, and nearly half worsen in severity. Their mortality is high, particularly in patients with worsening acute respiratory distress syndrome, emphasizing the need for close attention to this patient population.

Mots-clefs

DECEMBRE

Prediction of postoperative mortality in elderly patient with hip fractures: a single-centre, retrospective cohort study.

Niessen R, Bihin B, Gourdin M, Yombi JC, Cornu O, Forget P.

Références	*Doi*	*IF*
BMC Anesthesiol. 2018 Dec 3;18(1):183	*10.1186/s12871-018-0646-x*	*1,788*

Abstract

BACKGROUND:
Elderly patients are at high risk for postoperative complications and increased mortality after hip fracture (HF) surgery due to frailty and co-morbidities. The prediction of postoperative outcome could be used for clinical decision making. A reliable score to predict postoperative mortality after HF surgery in this sub-population remains unavailable.

METHODS:
A single-centre retrospective cohort study was performed in 782 patients who were operated on for HF. Receiver Operating Characteristic (ROC)-curves were used to analyse the performance of gender, age, neutrophil-to-lymphocyte ratio (NLR) and C-reactive protein (CRP) at admission (Do) as prognostic factors, alone or combined with the PreOperative Score to predict PostOperative Mortality (POSPOM) in univariate and multivariate linear regression models.

RESULTS:
No correlation between gender, age, NLR Do or CRP Do and postoperative, intra-hospital mortality was found. The Area Under the ROC-curve (AUC) for age, male gender, NLR and CRP were 0.61 [95% confidence interval (CI) = 0.45-0.61], 0.56 [95% CI = 0.42-0.56], 0.47 [95% CI = 0.29-0.47] and 0.49 [95% CI = 0.31-0.49] respectively. Combination with the POSPOM score did not increase its discriminative capacity as neither age (AUC = 0.69, 95% CI = 0.54-0.69), gender (AUC = 0.72, 95% CI = 0.58-0.72), NLR Do (AUC = 0.71, 95% CI = 0.56-0.71), nor the CRP Do (AUC = 0.71, 95% CI = 0.58-0.71) improved the POSPOM performance.

CONCLUSIONS:
Neither age, gender, NLR Do nor CRP Do are suitable parameters to predict postoperative, intra-hospital mortality in elderly patients undergoing surgery for HF.

Mots-clefs

Biomarkers; C–reactive protein; Frailty; Hip fractures; Hospital mortality

PAX5 P80R mutation identifies a novel subtype of B-cell precursor acute lymphoblastic leukemia with favorable outcome.

Passet M, Boissel N, Sigaux F, Saillard C, Bargetzi M, Ba I, Thomas X, **Graux C,** Chalandon Y, Leguay T, Lengliné E, Konopacki J, Quentin S, Delabesse E, Lafage-Pochitaloff M, Pastoret C, Grardel N, Asnafi V, Lhéritier V, Soulier J, Dombret H, Clappier E.

Références	*Doi*	*IF*
Blood. 2018 Dec 3. pii: blood-2018-10-882142	*10.1182/blood-2018-10-882142*	*15,132*

Abstract

Mots-clefs

Une brève histoire de la thérapie intraveineuse

Hecq J-D.

Références	*Doi*	*IF*
J Pharm Bel 2018;100(4):38-50		*1,16*

Abstract

En milieu hospitalier, une partie importante des médications est administrée par perfusion intraveineuse. Cette pratique est aujourd'hui routinière. L'histoire de l'administration des médications se mêle à celles de la transfusion, de l'anesthésie et du développement du matériel d'administration et s'étend sur plus de 400 ans. Le but de cet article est de retracer les grandes étapes de ces développements.

Mots-clefs

Histoire ; Thérapie intraveineuse ; Médicament injectable ; Perfusion ; Pharmacie hospitalière.

First report of coexistence of MOG-antibody-positive disease and Crohn's disease.

Philippart M, Fastré S, Rahier JF, London F

Références	*Doi*	*IF*
Mult Scler Relat Disord. 2018 Dec 3;28:1-3	*10.1016/j.msard.2018.12.006*	*3,199*

Highlights

- This is the first report of coexisting MOG-autoimmunity and Crohn's disease.
- Poyautoimmunity is infrequent in MOG antibody-associated demyelination.
- Anti-TNF alpha therapies and rituximab should be avoided.
- A relationship between MOG-autoimmunity and anti-TNF alpha therapy is uncertain.

Mots-clefs

Systemic treatments for thymoma and thymic carcinoma: A systematic review.

Berghmans T, Durieux V, Holbrechts S, Jungels C, Lafitte JJ, Meert AP, Moretti L, **Ocak S,** Roelandts M, Girard N.

Références	*Doi*	*IF*
Lung Cancer. 2018 Dec;126:25-31	*10.1016/j.lungcan.2018.10.018*	*4,486*

Abstract

Thymic tumours are rare diseases that for most of the cases are cured with surgery and eventually adjuvant radiotherapy. However, about 30% of patients present with advanced stage or relapsing tumours, which require administration of chemotherapy. While cisplatin-adriamycin-cyclophosphamide combination is regularly prescribed, other drugs have been assessed in the literature. Our aim is to evaluate the effectiveness (response rate) of systemic treatments, whatever the therapeutic line, including chemotherapy, targeted therapies and immunotherapies, in thymoma and thymic carcinoma, using the principles of evidence-based medicine. A systematic review was designed using the PICO system, by an experienced librarian and clinicians' experts in thoracic oncology, through the Ovid Medline system. Only phase II-IV trials and retrospective studies including at least 14 patients treated with the same regimen were considered. Articles were independently selected by at least two investigators. Fifty-five eligible articles were retrieved. Sixty% were dealing with platinum-based regimens, mainly cisplatin, and showed overall similar activity (mostly response rate above 50%) independently of the line of treatment or histological type (thymoma versus thymic carcinoma). Non-platinum based regimens included octreotide-prednisone and capecitabine-gemcitabine. Promising data of immunotherapy with antiPDL1 antibody (pembrolizumab) requires confirmation. Based on available data, the most popular and active regimens are cisplatin-anthracycline (CAP or ADOC) or cisplatin-etoposide combinations that should be recommended when considering first-line chemotherapy in thymoma or thymic carcinoma

Mots-clefs

Chemotherapy; Systematic review; Thymic carcinoma; Thymoma

Optic nerve double inversion recovery hypersignal in patients with clinically isolated syndrome is associated with asymptomatic gadolinium-enhanced lesion

London F, Zéphir H, Hadhoum N, Lannoy J, Vermersch P, Pruvo JP, Hodel J, Leclerc X, Outteryck O.

Références	*Doi*	*IF*
Mult Scler. 2018 Dec 3:1352458518815797	*10.1177/1352458518815797*	*5,28*

Abstract

BACKGROUND:
Optic nerve involvement is not considered in dissemination in space (DIS) or time (DIT) of multiple sclerosis (MS) lesions.
OBJECTIVES:
To evaluate frequency of optic nerve involvement using three-dimensional (3D)-double inversion recovery (DIR) sequence in clinically isolated syndrome (CIS) and to measure its relationship with DIS and DIT (2010 and 2017 McDonald criteria).
METHODS::
From November 2013 to August 2016, 57 CIS patients underwent 3T-magnetic resonance imaging (3T-MRI) including 3D-DIR sequence and optical coherence tomography (OCT) at 3 months after CIS. We assessed signal abnormalities of the optic nerves on DIR sequence and collected data for DIS and DIT criteria according to 2010 and 2017 McDonald criteria.
RESULTS:
Among the 57 recruited patients, the presence of ≥1 DIR hypersignal in optic nerve was observed in 36 (63%; 48 optic nerves) including asymptomatic hypersignal in 22 (38.5%; 25 optic nerves). Optic nerve involvement was significantly associated with DIT ($p = 0.006$) and MS according to 2010 criteria ($p = 0.01$) but was not significantly associated with presence of DIS criteria according to 2010 and 2017 McDonald criteria. We identified a significant ($p < 0.001$) temporal peripapillary retinal nerve fiber layer thinning on eyes with optic nerve involvement versus healthy controls.
CONCLUSIONS:
Optic nerve involvement is very frequent at the earliest clinical stage of MS. It is associated with the presence of asymptomatic gadolinium-enhancement and retinal axonal loss and may reflect the inflammatory disease activity level.

Mots-clefs

CIS; DIR; MRI; multiple sclerosis; optic neuritis

Innovations en anesthésiologie que retenir ?

Lebrun-Lambeau C, Stouffs A, Van Regemorter V, **Dubois P**, Pirotte T, Van Dyck M, Watremez C, Momeni M, Sanchez Torres C.

Références	*Doi*	*IF*
Louvain Médical 2018;137(2):66-73		*0,05*

Abstract

Les progrès en anesthésie n'ont pas été brutaux mais progressifs. S'il n'y a pas de réelle innovation, on peut cependant parler d'une évolution de la pratique qui, grâce à une meilleure compréhension de l'anatomie, de la physiologie et de la pharmacologie, associée à de grands progrès dans le domaine de la surveillance (monitoring) peropératoire, améliore la sécurité pendant toute la période périopératoire. Nous épinglons en 2017 l'utilisation croissante du monitoring EEG et l'évaluation continue de la profondeur de l'anesthésie, permettant d'éviter une anesthésie trop légère mais aussi trop profonde. Nous évoquerons aussi la nécessité d'une utilisation plus sûre des curares et les énormes progrès que les développements de l'échographie ont permis.

Mots-clefs

Périopératoire ; monitoring de profondeur d'anesthésie ; délire ; troubles cognitifs ; bloc neuro-musculaire ; échographie ; anesthésie loco-régionale ; accès vasculaire

Clinical and electrophysiological investigation of spastic muscle overactivity in patients with disorders of consciousness following severe brain injury.

Martens G, **Deltombe T,** Foidart-Dessalle M, Laureys S, Thibaut A.

Références	*Doi*	*IF*
Clin Neurophysiol. 2018 Dec 6;130(2):207-213.	*10.1016/j.clinph.2018.10.021*	*3,614*

Abstract

OBJECTIVE:
The clinical and electrophysiological profile of spastic muscle overactivity (SMO) is poorly documented in patients with disorders of consciousness (DOC) following severe cortical and subcortical injury. We aim at investigating the link between the clinical observations of SMO and the electrophysiological spastic over-reactivity in patients with prolonged DOC.

METHODS:
We prospectively enrolled adult patients with DOC at least 3 months post traumatic or non-traumatic brain injury. The spastic profile was investigated using the Modified Ashworth Scale and the Hmax/Mmax ratio. T1 MRI data and impact of medication were analyzed as well.

RESULTS:
21 patients were included (mean age: 41 ± 11 years; time since injury: 4 ± 5 years; 9 women; 10 traumatic etiologies). Eighteen patients presented signs of SMO and 11 had an increased ratio. Eight patients presented signs of SMO but no increased ratio. We did not find any significant correlation between the ratio and the MAS score for each limb (all ps › 0.05). The presence of medication was not significantly associated with a reduction in MAS scores or Hmax/Mmax ratios.

CONCLUSIONS:
In this preliminary study, the Hmax/Mmax ratio does not seem to reflect the clinical MAS scores in patients with DOC. This supports the fact they do not only present spasticity but other forms of SMO and contracture.

SIGNIFICANCE:
Patients with DOC are still in need of optimized tools to evaluate their spastic profile and therapeutic approaches should be adapted accordingly.

Mots-clefs

Coma; H/M ratio; Minimally conscious state; Modified Ashworth Scale; Spasticity; Unresponsive wakefulness syndrome

Reassessing the BODE score as a criterion for listing COPD patients for lung transplantation.

Berghmans T, Durieux V, Holbrechts S, Jungels C, Lafitte JJ, Meert AP, Moretti L, **Ocak S,** Roelandts M, Girard N.

Références	*Doi*	*IF*
Int J Chron Obstruct Pulmon Dis. 2018 Dec 10;13:3963-3970	*10.2147/COPD.S182483*	*2,917*

Abstract

BACKGROUND:
The BODE score (incorporating body mass index, airflow obstruction, dyspnea and exercise capacity) is used for the timing of listing for lung transplantation (LTx) in COPD, based on survival data from the original BODE cohort. This has limitations, because the original BODE cohort differs from COPD patients who are candidates for LTx and the BODE does not include parameters that may influence survival. Our goal was to assess whether parameters such as age, smoking status and diffusion indices significantly influence survival in the absence of LTx, independently of the BODE.

METHODS:
In the present cohort study, the BODE was prospectively assessed in COPD patients followed in a tertiary care hospital with an LTx program. The files of 469 consecutive patients were reviewed for parameters of interest (age, gender, smoking status and diffusing capacity of the lungs for carbon monoxide [DL,CO]) at the time of BODE assessment, as well as for survival status. Their influence on survival independent of the BODE score was assessed, as well as their ability to predict survival in patients aged less than 65 years.

RESULTS:
A Cox regression model showed that the BODE score, age and DL,CO were independently related to survival (P-values ‹0.001), as opposed to smoking status. Survival was better in patients aged less than 65 in the first (P=0.004), third (P=0.002) and fourth BODE quartiles (P=0.008). The difference did not reach significance in the second quartile (P=0.13). Median survival for patients aged less than 65 in the fourth BODE quartile was 55 months. According to a receiver operating characteristic curve analysis, the BODE score as well as FEV1 and DL,CO fared similarly in predicting survival status at 5 years in patients aged less than 65 years.

CONCLUSION:
Age and DL,CO add to the BODE score to predict survival in COPD. Assessing survival using tools tested in cohorts of patients younger than 65 years is warranted for improving the listing of patients for LTx.

Mots-clefs

BODE index; CO; COPD; DL; age; gender; smoking status; survival

Nosocomial outbreak of extended-spectrum β-lactamase-producing Enterobacter cloacae among cardiothoracic surgical patients: causes and consequences

Noël A, Vastrade C, Dupont S, de Barsy M, Huang TD, Delaere B, Melly L, Van Maerken T, **Rondelet B, Dransart C, Dincq AS, Michaux I, Bogaerts P, Glupczynski G.**

Références	*Doi*	*IF*
J of Hospit infec 2018	*10.1016/j.jhin.2019.01.001*	*3,354*

Abstract

BACKGROUND

Enterobacteriaceae are recognized as leading pathogens of healthcare-associated infections.

Aim

To report the investigation of a nosocomial outbreak of extended-spectrum β-lactamase-producing Enterobacter cloacae affecting cardiothoracic surgery patients in a Belgian academic hospital.

METHODS

Cases were defined based on epidemiological and microbiological investigations, including molecular typing using repetitive element-based polymerase chain reaction and multi-locus sequence typing. Case–control studies followed by field evaluations allowed the identification of a possible reservoir, and the retrospective assessment of human and financial consequences.

FINDINGS

Over a three-month period, 42 patients were infected or colonized by CTX-M-15-producing E. cloacae strains that belonged to the same clonal lineage. Acquisition mainly occurred in the intensive care unit (N = 23) and in the cardiothoracic surgery ward (N = 16). All but one patient had, prior to acquisition, undergone a cardiothoracic surgical procedure, monitored by the same transoesophageal echocardiography (TOE) probe in the operating room. Despite negative microbiological culture results, the exclusion of the suspected probe resulted in rapid termination of the outbreak. Overall, the outbreak was associated with a high mortality rate among infected patients (40%) as well as significant costs (€266,550).

CONCLUSION

The outbreak was indirectly shown to be associated with the contamination of a manually disinfected TOE probe used per-operatively during cardiothoracic surgery procedures, because withdrawal of the putative device led to rapid termination of the outbreak.

Mots-clefs

Microbiology (medical) ; Infectious Diseases ; General Medicine

Editorials

Zdanowicz N.

Références	*Doi*	*IF*
Psych Danubina 2018 : S396		*1,341*

Abstract

Mots-clefs

Determining clinically important differences in health-related quality of life in older patients with cancer undergoing chemotherapy or surgery.

Quinten C, Kenis C, Decoster L, Debruyne PR, De Groof I, Focan C, Cornelis F, Verschaeve V, Bachmann C, Bron D, Luce S, Debugne G, Van den Bulck H, **Goeminne JC,** Baitar A, Geboers K, Petit B, Langenaeken C, Van Rijswijk R, Specenier P, Jerusalem G, Praet JP, Vandenborre K, Lycke M, Flamaing J, Milisen K, Lobelle JP, Wildiers H.

Références	*Doi*	*IF*
Qual Life Res. 2018 Dec 3	*10.1007/s11136-018-2062-6*	*2,392*

Abstract

PURPOSE:
Using the EORTC Global Health Status (GHS) scale, we aimed to determine minimal clinically important differences (MCID) in health-related quality of life (HRQOL) changes for older cancer patients with a geriatric risk profile, as defined by the geriatric 8 (G8) health screening tool, undergoing treatment. Simultaneously, we assessed baseline patient characteristics prognostic for HRQOL changes.

METHODS:
Our analysis included 1424 (G8 ≤ 14) older patients with cancer scheduled to receive chemotherapy (n = 683) or surgery (n = 741). Anchor-based methods, linking the GHS score to clinical indicators, were used to determine MCID between baseline and follow-up at 3 months. A threshold of 0.2 standard deviation (SD) was used to exclude MCID estimates too small for interpretation. Logistic regressions analysed baseline patient characteristics prognostic for HRQOL changes.

RESULTS:
The 15-item Geriatric Depression Scale (GDS15), Visual Analogue Scale (VAS) for Fatigue and ECOG Performance Status (PS) were selected as clinical anchors. In the surgery group, MCID estimates for improvement and deterioration were ECOG PS (5*, 11*), GDS15 (5*, 2) and VAS Fatigue (3, 9*). In the chemotherapy group, MCID estimates for improvement and deterioration were ECOG PS (8*, 7*), GDS15 (5, 4) and VAS Fatigue (5, 5*). Estimates with * were › 0.2 SD threshold. Patients experiencing pain or malnutrition (surgery group) or fatigue (chemotherapy group) at baseline showed a significantly stable or improved HRQOL ($p < 0.05$) after their treatment.

CONCLUSION:
The reported MCID for improvement and deterioration depended on the anchor used and treatment received. The estimates can be used to evaluate significant changes in HRQOL and to determine sample sizes in clinical trials

Mots-clefs

Cancer; Elderly patients with cancer; Geriatric assessment; Minimal important differences; Quality of life

Traceability of Blood Transfusions and Reporting of Adverse Reactions in Developing Countries: A Six-Year Postpilot Phase Experience in Burkina Faso.

Sawadogo S, Nebie K, Millogo T, Sontie S, Nana A, Dahourou H, Yonli DY, Tapko JB, Faber JC, Kafando E, **Deneys V.**

Références	*Doi*	*IF*
Adv Hematol. 2018 Dec 20;2018:7938130	*10.1155/2018/7938130*	*1,60*

Abstract

Traceability is an essential tool for haemovigilance and transfusion safety. In Burkina Faso, the implementation of haemovigilance has been achieved as part of a pilot project from 2005 to 2009. Our study aims to evaluate the traceability of blood transfusions and reporting of adverse reactions over the 6-year postpilot phase. A cross-sectional study including all blood units ordered between 2010 and 2015 has been conducted in public and private health care facilities supplied with blood products by the transfusion center of Bobo-Dioulasso. The complete traceability was possible for 83.5% of blood units delivered. Adverse reactions were reported in 107 cases representing 2.1/1,000 blood units per annum. Transfusions of wrong blood to wrong patient were reported in 13 cases. Our study shows that the haemovigilance system in Burkina Faso must be improved. Healthcare workers have to be sensitized on how traceability and haemovigilance could impact the quality of care provided to patients.

Mots-clefs

Liver cyst infection in kidney transplant patient with autosomal dominant polycystic kidney disease : Interest of PET/CT in diagnosis and treatment

Georgery H, Migali G, Pochet JM, Tintillier M, Van Ende D, Cuvelier C.

Références	*Doi*	*IF*
J Clin Nephrol, 2018;2(3):053-056	*10.29328/journal.jcn.1001019*	

Abstract

Liver cyst infection in patients with autosomal dominant polycystic kidney disease (ADPKD)is a rare but life-threatening complication. Diagnosis and treatment remain challenging. We report the case of a 64-year-old kidney transplant patient presenting with fever and abdominal pain. The diagnosis of liver cyst infection was made by positron emission tomography scan (PET/CT). Moreover, the course of our patient illustrates the interest of subsequent PET/CT during follow-up as our patient failed on antibiotherapy and required liver cyst drainage.

Mots-clefs

Site Dinant

+32 (0)82 21 24 11
Rue Saint Jacques,501 - 5500 Dinant

Site Godinne

+32 (0)81 42 21 11
Avenue Dr Gaston-Therasse 1, 5530 Yvoir

Site Sainte-Elisabeth

+32 (0)81 72 04 11
Place Louise Godin 15 - 5000 Namur

www.chuuclnamur.be

Dinant • Godinne • Sainte-Elisabeth

CHU UCL NAMUR

Mars 2019 | Editeur responsable : Benoît Libert, CHU UCL Namur asbl. | Av. Docteur G. Thérasse, 1 - B5530 Yvoir (Belgique) | RPM BE 641.733.885 | Réalisation : Unité de Support Scientifique