

COMMUNICATIONS ORALES

Jeudi 27 septembre 2018

Study of senescent human keratinocytes and their impact on cancer cells.

E. Bauwens, T. Parée, C. Hannart, L. Ernst, N. Ninane, C. Demazy, F. Debaq-Chainiaux, University of Namur.

Senescent cells are known to accumulate with age in various tissues, and these cells are considered as a hallmark of ageing [1]. In the skin, an extrinsic ageing is superimposed to intrinsic ageing, due to repeated exposures to external stress [2]. Among them, UV rays are the most harmful and lead to skin photo-ageing [3].

In this work, we propose a model of senescence prematurely induced in normal human keratinocytes (NHKs) by exposing them to repeated exposures of UVB that we called UVB-SIPS. At 3 days after the last stress, we observed the presence of senescence biomarkers such as growth arrest, SA- β gal, modifications in gene expression and a modified secretory phenotype (SASP), as observed in replicative senescent (RS) NHKs. We also showed that UVB-SIPS NHKs present long-term direct DNA damage (pyrimidine dimers) associated with an activation of the DNA damage response (DDR). Finally, by using conditioned media harvested from senescent keratinocytes (in RS and UVB-SIPS), we observed that senescent NHKs influence the migration behaviour of A431 cancerous cell lines.

1.Lopez-Otin, C., Blasco, M. A., Partridge, L., Serrano, M. & Kroemer, G. The hallmarks of aging. Cell 153, 1194-1217, doi:10.1016/j.cell.2013.05.039 (2013).

2.Krutmann, J., Bouloc, A., Sore, G., Bernard, B. A. & Passeron, T. The skin aging exposome. J Dermatol Sci 85, 152-161, doi:10.1016/j.jdermsci.2016.09.015 (2017).

3.Toutfaire, M., Bauwens, E. & Debaq-Chainiaux, F. The impact of cellular senescence in skin ageing: A notion of mosaic and therapeutic strategies. Biochem Pharmacol, doi:10.1016/j.bcp.2017.04.011 (2017).

Quelle place pour la mesure de la force linguale dans l'évaluation gériatrique en gériatrie aiguë ?

A Gassavelis, A. De Buck, O. Barthelemy, L. Decorte, M. DeGieter, **F. Benoît**, M. Surquin, CHU Brugmann

Objectif :

L'évaluation gériatrique (EG) dépiste des syndromes gériatriques tels que la dénutrition, la dysphagie et la sarcopénie. La mesure de la force de langue apparait comme un nouvel outil dans le bilan ces pathologies. L'objectif de cette étude est d'observer les valeurs de force linguale chez des patients hospitalisés en gériatrie aiguë, de déterminer les caractéristiques gériatriques associées aux valeurs de force linguale, et d'objectiver l'intérêt de l'intégration de cette mesure dans l'EG.

Méthodologie :

45 patients hospitalisés en gériatrie au CHU Brugmann ont été enrôlés prospectivement. La force linguale maximale antérieure et postérieure est mesurée à l'aide de L'Iowa Oral Performance, et les données relatives à l'EG sont collectées

Résultats :

La force linguale apparait statistiquement corrélée à l'âge, la vitesse de marche, le BMI, le MNA-SF, le risque de dénutrition ainsi que le choix de la texture alimentaire donnée au patient selon les critères de l'IDDSI.

Conclusion :

Cette étude suggère qu'une diminution de force linguale est associée à un risque accru d'altération de force musculaire, de troubles nutritionnels et de dysphagie. Ces résultats suggèrent l'utilité de la mesure de force linguale dans le dépistage de syndromes gériatriques tels que la sarcopénie, la dysphagie et la dénutrition. Au vu des différences entre les données recueillies dans la présente étude et les normes belges de force linguale, la conduite de nouvelles études européennes visant à définir la force linguale moyenne chez une personne âgée hospitalisée semble nécessaire.

Identifying important items of quality of life of frail older subjects: a qualitative study among patients and professionals

F. Buckinx¹, Ch. Beaudart¹, Y. Rolland², JY Reginster¹, M. Cesari³, R. Rizzoli⁴, J Petermans⁵, B. Fougère⁶, O. Bruyère¹

1. Department of Public Health, Epidemiology and Health Economics, University of Liège, Belgium. WHO collaborating Centre for Public Health Aspects of Musculoskeletal Health and Aging. 2. Gérontopôle, University Hospital of Toulouse III, Toulouse, France, University of Toulouse III, France ; 3. Geriatric Unit, Fondazione Ca'Granda – Ospedale Maggiore Policlinico, Milano, Italy. 4. Service of Bones Diseases, Department of Internal Medicine Specialities, Geneva University Hospitals and Faculty of Medicine, Geneva, Switzerland ; 5. Department of Geriatrics, CHU-Liège, Liège, Belgium. 6. Division of Geriatric Medicine, Saint Louis University School of Medicine, St Louis, US.

Objective:

In recent years, there has been an increased focus on placing patients at the center of health care research. In this sense, the aim of this study was to identify important items of quality of life of frail older subjects.

Methods:

A Delphi survey was conducted among professionals in the field of frailty (i.e. members of the working groups on frailty from the EUGMS or ESCEO). We also performed two focus groups, one in frail community-dwelling older subjects and one in frail nursing home residents. Frailty was assessed using different definitions.

Results:

The important items to assess quality of life related to frailty, highlighted by frail patients themselves (n=14) or by professionals (n=35), have been indexed in 6 domains, based on the concept of intrinsic capacity proposed by the WHO: locomotion, sensory, vitality, psychosocial, cognition and others. Respectively 78 and 52 items have been highlighted by the Delphi Approach and the focus groups. Globally, professionals and older patients cited a majority of items from the domain of vitality (i.e. 14 items cited by both professionals and patients). Moreover, community-dwelling elderly cited many items in the psychosocial field (i.e. 8 items) while nursing home residents did not (i.e. 1 item). Professionals also place a lot of importance on locomotion (i.e. 13 items).

Conclusion:

The items identified both by the Delphi approach and the focus groups could be interesting to develop a frailty specific Patient-Reported Outcomes (PRO).

Prevalence of Fear to Fall Among Nursing Home Residents

D. Schoevaerdt, S. Bourdelles, M. Rigault, **G. Cremer**, Geriatric Department, CHU-UCL-Namur-Yvoir.

Purpose:

To determine prevalence and potential risk factors of Fear to Fall among nursing home (NH) residents

Methods:

During a 2 months period, a cross-sectional survey was performed among 130 NH residents recruited within 3 Belgian facilities located in the surrounding area of Yvoir. The Short Fall Efficacy Scale 1 (FES-1) was used to detect Fear to Fall (cut-off ≥ 11/28). Demographic and clinical data were prospectively collected.

Results:

Prevalence of Fear to Fall was high (57%; 95%CI: 0.49-0.66). Characteristics more frequently observed in the group experiencing Fear to Fall were: female gender (P: 0.021), high age (P: 0.051), history of falls (P: 0.039), visual impairments (P< 0.001), low functional status (P: 0.028), high Hamilton score (P: 0.001), need for a walking device (P<0.001), poor subjective health assessment (P: 0.001), polypharmacy (P: 0.023), low Short Physical Performance Battery score (P<0.001), low grip-strength (P: 0.023), high Get-up early test score (P: 0.001) and low walking speed (P<0.001). Using multilevel logistic regression, independent predictors were: need for a walking aid (adj.OR: 10.7 [95%CI: 3.6-30.6]; P<0.001), high Hamilton scale score (adj.OR: 7.5 [95%CI: 1.6-35.2]; P: 0.011), polypharmacy (adj. OR: 7.04 [95%CI: 1.5-34.0]; P: 0.015) and visual problems (adj.OR: 5.3 [95%CI: 1.6-17.9]; P: 0.008). Discrimination of the model was good (AUC: 0.870).

Conclusions:

Fear to Fall was highly prevalent among NH residents. Screening of persons with a high level of anxiety, visual loss, polypharmacy and using a walking aid may contribute to target this population and implement interventional strategies reducing Fear to Fall.

Faire participer les soignants aux décisions concernant la diminution de l'utilisation de la contention Une méthode prometteuse.

E. De Bruycker¹, J-F Blairon², C. Vanderick³, D. Schoevaerdt⁴

1. Institut de Recherche Santé et Société, Faculté de Santé Publique, UCL Hainaut; 2. Infirmier en Chef, service de Gériatrie, Haute Senne; 3.Chargée de projet en Sciences de la Santé Publique, Namur, 4. Gériatre, UCL, Mont-Godinne

Introduction :

La contention physique est une pratique qui est rapportée dans les institutions de soins pour personnes âgées bien qu'il soit recommandé d'en limiter l'utilisation. Partant de ce constat, nous avons choisi de mener un programme de type recherche-action dans un service de Gériatrie. Le but étant d'observer l'effet d'une démarche participative sur l'utilisation de la contention.

Méthodes :

La démarche consiste en une série de réunions de discussion semi-dirigées, incluant de manière collective les professionnels de l'équipe pluridisciplinaire. Elle se caractérise par les six étapes suivantes: réalisation d'un plan de communication, étape diagnostique avec état des lieux du vécu des soignants par rapport à la contention, définition des changements possibles avec leurs freins et leviers, définition d'actions prioritaires à développer, implémentation des outils créés et mise en place de séances d'évaluation du projet (entretiens et questionnaire). A cette approche qualitative est jointe une mesure d'impact, sous forme d'une étude de type « avant-après », qui observe sur deux périodes la prévalence de l'utilisation de la contention physique

Résultats:

Notre étude démontre une diminution de la prévalence (moyenne journalière de patients contenus) de 59%, malgré des profils de patients similaires voir plus lourds pour certaines caractéristiques. Elle révèle également un changement significatif au niveau de la compliance des soignants aux recommandations de bonne pratique publiées par l'ANAES (5 recommandations sur 10).

Conclusion:

Notre démarche a permis de montrer que la participation des professionnels à l'adaptation de leurs pratiques a un impact favorable, à court terme, sur la prévalence de la contention.

L'utilisation d'un algorithme de déprescription des antipsychotiques est-elle envisageable en gériatrie ?

V. Delbecq^{1,2}, A. Vandenberghe¹, B. Dubois³, B. Latour⁴, N. Kirch⁵, A. Koutla⁴, O. Dalleur^{6,7,1}, 1. Pharmacien clinicien et hospitalier, CHWAPI ; 2. Faculté de Pharmacie de l'Université catholique de Louvain. 3. Service de Pharmacie, CHWAPI ; 4. Médecin Généraliste au sein du Service de Gériatrie, CHWAPI ; 5. Psychiatre, services de Psychiatrie et de Psychogériatrie, CHWAPI ; 6. Faculté de Pharmacie et des Sciences Biomédicales, UCL ; 7. Drug Research Institute, UCL

Objectif:

Guidelines recommend frequent reassessment of antipsychotic prescriptions in the elderly to avoid inappropriate overuse. To use a Canadian antipsychotic de-prescribing algorithm to reduce antipsychotics taken by geriatric patients. The primary objective is to assess the algorithm applicability in a Belgian geriatric population. Applicability was defined as the percentage of suitable actions recommended by the algorithm. Then, to measure the implementation of de-prescribing in case of inappropriate overuse according to the algorithm.

Method:

A interventional study was conducted in the CHwapi (psycho-)geriatric hospital wards. A clinical pharmacist applied the algorithm to each patient, taking into account their individual indication of the antipsychotics. Next, the pharmacist and a physician assessed the clinical relevance of the action recommended by the algorithm and applied this action when considered suitable.

Results:

This 9 weeks survey includes 151 patients (82,30 ±9,94 years old), for which 61 are under antipsychotic prescription(s), giving 85 antipsychotic prescriptions overall. The algorithm applicability is about 80,00%. The two most frequent indications are associated to dementia (50,99% of the patients). Forty percent (34/85) of the prescriptions were potentially inappropriate among which 52,94% (18/34) were successfully de-prescribed.

Conclusion:

This algorithm is an applicable tool in geriatric wards and actually allows to de-prescribe antipsychotics. However, there is still room for improvement in order to further increase de-prescription of inappropriate overuse. The presence of the pharmacist in those wards is key to drive the application of the algorithm, detect specific cases and raise overall awareness among the caring people on the usage of antipsychotics.

Anti-depressant prescribing practices in Belgian nursing homes.

AE Petit¹, P Anrys¹, G Strauven², V Foulon² and A. Spinewine¹. 1. UCL, LDRI, Clinical Pharmacy Research Group ; 2. KULeuven, Department of Pharmaceutical and Pharmacological Sciences.

Purpose :

To examine the prevalence and the appropriateness of antidepressant prescribing in Belgian nursing home residents, with details on drug choices, dosages and potential indications.

Methods :

Sub-analysis of baseline data from the Collaborative approach to Optimize MEdication use for Older people in Nursing homes (COME-ON) intervention study. The sample included 901 residents living in 54 Belgian nursing homes. Cross-sectional analyses were done using clinical and medication data recorded by participating healthcare professionals. Detection of antidepressant-related Potentially Inappropriate Prescription (PIP) was based on Beers 2015 and STOPP v2 explicit criteria.

Results :

The overall prevalence of antidepressant use was 46%. The most commonly prescribed antidepressant subclass was “ other antidepressants” (ATC_N06AX, 52% of prescriptions), with trazodone as a leader (28% of prescriptions). With an exception for trazodone, the great majority of prescriptions (90.4%) met current drug-dosing recommendations for depression in the older adults. While 59% of users had a diagnosis of depression, 28% were found with no relevant indication for antidepressant prescription (e.g. depression, anxiety or neuropathic pain). Remarkably, 42% of users had at least one antidepressant-related PIP. The most prevalent PIPs were the use of TCA or SSRI i) in combination with CNS-active drugs (26% of users) and ii) in residents with a recent history of falls and fractures (23%).

Conclusions :

Antidepressant use in nursing home residents is particularly high and often at odds with current recommendations. Efforts need to be made to design interventions dedicated to reduce potentially inappropriate antidepressant use in the nursing home setting.

Identifying high-risk caregiver-care-receiver dyad : a cohort study.

F. PotierMD^{1,2}, JM Degryse PhD^{2,3}, B. Bihind⁴, F. Debaq-ChainiauxPhD⁵, Chantal Charlet-Renard⁶, Henri Martens PhD⁶, M. de Saint Hubert Ph D^{1,2}. 1. Departement of Geriatrics, CHU Université Catholique de Louvain, Namur. 2. Institute of Health and Society, Université Catholique de Louvain, Brussels; 3. Departments of Public Health and Primary Care, Katholieke Universiteit Leuven ; 4. Scientific Support Unit, CHU Université Catholique de Louvain, Namur ; 5. URBC, Namur Research institute for Life Sciences (NARILIS), University of Namur, Belgium ; 6. GIGA Research Institute, University of Liege, Liège.

Objectif:

To longitudinally assess the health of older spousal caregivers considering the dynamic of health between caregiver and care-receiver. Explore factors associated with nursing home admission of the care-receiver.

Méthodologie:

Longitudinal, observational cohort study (16 months of follow-up). At baseline, 82 community-dwelling spouses of older patients with cognitive deficit or functional impairment were assessed at home; 78 caregivers were assessed at follow-up. Clinical instruments included the mini nutritional assessment-short form, short physical performance battery, frailty phenotype, geriatric depression

scale, clock drawing test, medications, Zarit burden index, Sense of Coherence, and Caregiver Reaction Assessment. Biological assessments included interleukin-6, ultra-sensitive C-reactive protein, cortisol, and insulin growth factor-1.

Résultats:

Among caregivers, 54% were women, and the mean age was 80 years. Among care-receivers, 83% had cognitive impairment. One caregiver in three presented an incident frailty at follow-up. Burden and nutritional, physical and cognitive statuses were more stable over time. Declines did not necessarily correspond in the couple. Differences in health between caregivers' still giving care at follow-up and those who were not were explored. Both care-receiver (moderately severe cognitive decline) and caregiver (moderate to severe burden) characteristics were associated with nursing home admission of the care-receiver.

Conclusion:

Many caregivers of geriatric patients are spouses who are old themselves and deserve full attention of professionals to anticipate a care breakdown. Health professionals should be attentive to signs of caregiver frailty, such as involuntary loss of weight and sedentary lifestyle. If certain high-risk caregiver-care-receiver dyad could be identified, they could be focused for support interventions.