REVISIÓN BIBLIOGRÁFICA JULIO 2018: selección de artículos

ARCHIVES OF GERONTOLOGY AND GERIATRICS

Effects of hyperpolypharmacy and potentially inappropriate medications (PIMs) on functional decline in older patients discharged from acute care hospitals

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Abstract

Aim

To comparatively investigate the effects of hyperpolypharmacy and potentially inappropriate medications (PIMs) on functional decline in older patients after hospital discharge.

Methods

Our series consisted of 733 patients aged ≥65 consecutively enrolled in a multicenter observational longitudinal study. PIMs were defined on the basis of updated versions of Beers and STOPP criteria. The occurrence of functional decline was defined as the loss of independency in at least 1 basic activity of daily living (BADL) from discharge through 3-month follow-up visit.

Results

After adjusting for several potential confounders, hyperpolypharmacy (OR = 2.20; 95%CI = 1.11–4.37) and Beers violations (OR = 1.99; 95%CI = 1.17–3.49) were significantly associated with functional decline, while STOPP (OR = 1.10; 95%CI = 0.64–1.88) and combined Beers + STOPP violations (OR = 1.72; 95%CI = 0.97–3.05) were not. In logistic regression models simultaneously including both hyperpolypharmacy and PIMs, hyperpolypharmacy was always associated with functional decline (OR = 1.98; 95%CI = 1.0–3.97 in the model including Beers violations; OR = 2.19; 95%CI = 1.11–4.35 in the model including STOPP violations; OR = 2.04; 95%CI = 1.02–4.06 in the model including combined Beers and STOPP violations). Beers violations (OR = 1.89; 95%CI = 1.09–3.28) also remained significantly associated with the outcome in this latter analysis, but not STOPP or combined Beers and STOPP violations.

Conclusions

Hyperpolypharmacy, and to a lesser extent Beers violations predict functional decline in older patients discharged from acute care hospitals, whilst STOPP criteria are no longer associated with the outcome after adjusting for potential confounders. Hyperpolypharmacy is associated with functional decline independent of PIMs.

Disponible en: https://www.sciencedirect.com/science/article/pii/S0167494318300839

JOURNAL OF CLINICAL INTERVENTIONS IN AGING

Frailty and nutritional status in older people: the Mini Nutritional Assessment as a screening tool for the identification of frail subjects

Valentini A, Federici M, Cianfarani MA, Tarantino U, Bertoli A

Abstract

Introduction: Frailty is a condition characterized by reduced resistance to low-level stress events, resulting from the progressive decline of multiple physiological systems observed with aging. Many factors can contribute to the pathogenesis of frailty, and nutritional status appears to play a key role. The objective of the study was to investigate the relationship between nutritional status, evaluated using Mini Nutritional Assessment (MNA), and frailty among older people.

Patients and methods: An observational study was carried out at the University Hospital "Tor Vergata" in Rome among patients aged 65 years or older, with or without hip fracture. The study sample included 62 patients hospitalized for a hip fracture and 50 outpatients without fracture. All subjects underwent blood sampling for laboratory assays and received a multidimensional geriatric evaluation comprising Activity of Daily Living (ADL), Instrumental Activity of Daily Living (IADL), Mini–Mental State Examination (MMSE), Geriatric Depression Scale (GDS), and MNA. Comorbidity was assessed using the Cumulative Illness Rating Scale for Geriatrics (CIRS-G). Muscle strength was measured by handgrip dynamometry, and frailty score was calculated using the Survey of Health, Ageing and Retirement in Europe-Frailty Index (SHARE-FI).

Results: Approximately 38% of the study population was frail, with the prevalence of frailty being greater among hospitalized older patients. Among frail subjects, 65% were at risk of malnutrition (RMN) and 10% were malnourished. The prevalence and RMN progressively diminished in the pre-frail group and not frail group. Nutritional status was closely associated with the degree of frailty, and in a logistic regression, MNA was the best variable predicting both pre-frailty and frailty.

Discussion and conclusion: Malnutrition contributes to the development of frailty. MNA can generate vital information to help identify a substantial part of both frail and pre-frail patients at low cost and care.

Disponible en: https://www.dovepress.com/frailty-and-nutritional-status-in-older-people-the-mini-nutritional-as-peer-reviewed-article-CIA

Thyroid function tests before prescribing anti-dementia drugs: a retrospective observational study

Sakata N, Okumura Y

Abstract

Purpose: Treatable causes of cognitive dysfunction, such as hypothyroidism, should be excluded by physicians before prescribing anti-dementia drugs. Many clinical guidelines for

dementia recommend a thyroid function test (TFT) as one of the standard screening tests for cognitive dysfunction. This study aimed to investigate the national implementation rate of TFTs during the 365 days before the initiation of anti-dementia drugs.
Patients and methods: In this retrospective observational study, using Japan's nationwide claim database, we enrolled ≥65-year-old patients who were newly prescribed anti-dementia drugs between April 2015 and March 2016. The outcome of this study was the implementation of TFTs in the 365 days prior to the index date. We used demographic data, including age, sex, comorbidities, home-based/institutional care, and provider type, as covariates.
Results: We identified 262,279 patients newly prescribed anti-dementia drugs; of these, only 32.6% underwent TFTs before the initiation of anti-dementia drug treatment. Patients treated in dementia care centers were twice as likely to undergo TFTs as those treated in clinics (57% vs 26%; adjusted risk ratio: 2.17; 95% confidence interval: 2.01–2.33).
Conclusion: In Japan, patients with dementia often do not undergo TFTs before being prescribed anti-dementia drugs, particularly in a primary care setting. This suggests that the practice of screening treatable cognitive dysfunction should be audited.

Disponible en: https://www.dovepress.com/thyroid-function-tests-before-prescribing-anti-dementia-drugs-a-retros-peer-reviewed-article-CIA

JOURNAL OF GERIATRIC ONCOLOGY

How to treat chronic myeloid leukemia (CML) in older adultS

Marlise R. Luskin, Daniel J. DeAngelo

Abstract
Chronic myeloid leukemia (CML), a myeloproliferative neoplasm defined by the t(9;22)(q34;q11) chromosomal translocation, primarily affects older adults. Historically, effective treatment options were not available for older CML patients ineligible for curative allogeneic stem cell transplant, and the disease was therefore usually fatal within several years of diagnosis. The development of tyrosine kinase inhibitors (TKIs) that effectively target the constitutively active mutant tyrosine kinase in CML has dramatically improved outcomes for all patients with CML, including older patients. While older patients were underrepresented in prospective trials, TKI therapy can be successfully administered to older adults with CML with excellent efficacy and proven tolerability. TKI selection and monitoring for adverse events should be tailored based on co-morbidities. As with younger patients, life expectancy of older adults with CML now approaches that of age-matched controls. Here we review guidelines for management of older adults with CML.

Disponible en: https://www.geriatriconcology.net/article/S1879-4068(18)30026-2/fulltext

Management of older adults with myelodysplastic syndromes (MDS)

Marlise R. Luskin, Gregory A. Abe

Abstract
The myelodysplastic syndromes (MDS) are a varied group of hematologic neoplasms that lead to bone marrow failure, and also carry a risk of progression to acute myeloid leukemia. Patients with MDS suffer significant impairments to both their quality of life and survival. Age is the

dominant risk factor for the development of MDS, with a median age at diagnosis over 70 years. Consequently, patients with MDS frequently have concurrent comorbidities and/or frailty which may be coincident or related to the disease itself. Disease characteristics, degree of comorbidity, and presence of frailty all impact prognosis. Treatment of MDS focuses on supportive care, with disease-modifying approaches (chemotherapy and allogeneic hematopoietic cell transplantation) reserved for fit patients with high-risk disease. Care of patients with MDS requires understanding the disease in the context of an older population, and tailoring approaches to both disease risk and patient suitability for therapy.

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Treatment of mantle cell lymphoma in older adults

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Abstract

Mantle cell lymphoma (MCL) predominantly affects older adults, with a median age at diagnosis of 70 years. A frequently aggressive yet incurable lymphoma, the goal of therapy for MCL is to turn a potentially life-threatening illness into a chronic disease with prolonged periods of remission. Large randomized trial data supports the standard treatment in younger patients of cytarabine-based induction followed by autologous stem cell transplant. Most patients will not be eligible for this intensive approach based on older age, comorbidities, and functional status, making the geriatric assessment an essential step in choosing the appropriate strategy. For these older patients, an increasing number of chemotherapy and non-chemotherapy based therapies are available that allow oncologists to better tailor treatment to the fitness of the patient. We will review treatment options for older patients with MCL in the first line and relapsed/refractory settings, highlighting the available evidence for providing longer progression-free intervals while also minimizing the adverse effects of unduly aggressive treatment.

Disponible en: https://www.geriatriconcology.net/article/S1879-4068(17)30269-2/fulltext

The incremental value of a geriatric assessment-derived three-item scale on estimating overall survival in older adults with cancer

Tomohiro F. Nishijima, Allison M. Deal, Jennifer L. Lund, Kirsten A. Nyrop, Hyman B. Muss, Hanna K. Sanoff

Abstract

Objective

A geriatric assessment (GA) assesses functional age of older patients with cancer and is a well-established tool predictive of toxicity and survival. The objective of this study was to investigate the prognostic value of individual GA items.

Materials and Methods

546 patients with cancer ≥ 65 years completed GA from 2009 to 2014 and were followed for survival status for a median of 3.7 years. The GA consisted of function, nutrition, comorbidity, cognition, psychological state, and social activity/support domains. GA items with $p < 0.05$ in univariable analyses for overall survival (OS) were entered into multivariable stepwise selection

procedure using a Cox proportional hazards model. A prognostic scale was constructed with significant GA items retained in the final model.

Results

Median age was 72 years, 49% had breast cancer, and 42% had stage 3–4 cancer. Three GA items were significant prognostic factors, independent of traditional factors (cancer type, stage, age, and Karnofsky Performance Status): (1) “limitation in walking several blocks”, (2) “limitation in shopping”, and (3) “≥ 5% unintentional weight loss in 6 months”. A three-item prognostic scale was constructed with these items. In comparison with score 0 (no positive items), hazard ratios for OS were 1.85 for score 1, 2.97 for score 2, and 8.67 for score 3. This translated to 2-year estimated survivals of 85%, 67%, 51% and 17% for scores of 0, 1, 2 and 3, respectively.

Conclusions

This three-item scale was a strong independent predictor of survival. If externally validated, this could be a streamlined tool with broader applicability.

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Delphi consensus of an expert committee in oncogeriatrics regarding comprehensive geriatric assessment in seniors with cancer in Spain

Maria-Jose Molina-Garrido, Carmen Guillén-Ponce, Remei Blanco,Juana Saldaña, Jaime Feliú, Maite Antonio, Rosa López-Mongil, Primitivo Ramos Cordero, Regina Gironés On behalf of the Working Group on Oncogeriatrics of the Spanish Society of Medical Oncology (SEOM)

Abstract

Objectives

The aim of this work was to reach a national consensus in Spain regarding the Comprehensive Geriatric Assessment (CGA) domains in older oncological patients and the CGA scales to be used as a foundation for widespread use.

Material and Methods

The Delphi method was implemented to attain consensus. Representatives of the panel were chosen from among the members of the Oncogeriatric Working Group of the Spanish Society of Medical Oncology (SEOM). Consensus was defined as ≥66.7% coincidence in responses and by the stability of said coincidence (changes ≤15% between rounds). The study was conducted between July and December 2016.

Results

Of the 17 people invited to participate, 16 agreed. The panel concluded by consensus that the following domains should be included in the CGA:(and the scales to evaluate them): functional (Barthel Index, Lawton-Brody scale, gait speed), cognitive (Pfeiffer questionnaire), nutritional (Mini Nutritional Assessment – MNA), psychological/mood (Yesavage scale), social-familial (Gijon scale), comorbidity (Charlson index), medications, and geriatric syndromes (urinary and/or fecal incontinence, low auditory and/or visual acuity, presence of falls, pressure sores, insomnia, and abuse). Also by consensus, the CGA should be administered to older patients with cancer for whom there is a subsequent therapeutic intent and who scored positive on a previous frailty-screening questionnaire.

Conclusion
After 3 rounds, consensus was reached regarding CGA domains to be used in older patients with cancer, the scales to be administered for each of these domains, as well as the timeline to be followed during consultation.

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Nutritional management of older adults with gastrointestinal cancers: An International Society of Geriatric Oncology (SIOG) review paper

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Abstract
Malnutrition is one of the most common physical manifestations of gastrointestinal (GI) cancers and is often under-diagnosed and under-treated. Like cancers, malnutrition occurs more commonly in older adults, with potential negative consequences to quality of life, functional status, tolerance to treatment, and prognosis. Nutritional assessment and management require a proactive and systematic, multi-disciplinary approach. Early assessment, detection, and prompt intervention of cancer–associated malnutrition and cachexia are equally essential to achieve better quality nutritional care for older oncology patients. This article aims to provide an overview of the evidence associated with poor nutrition and outcomes in older adults with GI cancers, and recommends a management approach from a geriatric oncologist's perspective.

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INTERNATIONAL JOURNAL OF GERIATRIC PSYCHIATRY

A roadmap to advance dementia research in prevention, diagnosis, intervention, and care by 2025

James Pickett Cathy Bird Clive Ballard Sube Banerjee Carol Brayne Katherine Cowan Linda Clare Adelina Comas-Herrera Lynne Corner Stephanie Daley Martin Knapp

Abstract
Objective
National and global dementia plans have focused on the research ambition to develop a cure or disease-modifying therapy by 2025, with the initial focus on investment in drug discovery approaches. We set out to develop complementary research ambitions in the areas of prevention, diagnosis, intervention, and care and strategies for achieving them.
Methods
Alzheimer's Society facilitated a taskforce of leading UK clinicians and researchers in dementia, UK funders of dementia research, people with dementia, and carer representatives to develop,

using iterative consensus methodology, goals and recommendations to advance dementia research.

Results

The taskforce developed 5 goals and 30 recommendations. The goals focused on preventing future cases of dementia through risk reduction, maximising the benefit of a dementia diagnosis, improving quality of life, enabling the dementia workforce to improve practice, and optimising the quality and inclusivity of health and social care systems. Recommendations addressed gaps in knowledge and limitations in research methodology or infrastructure that would facilitate research in prioritised areas. A 10-point action plan provides strategies for delivering the proposed research agenda.

Conclusions

By creating complementary goals for research that mirror the need to find effective treatments, we provide a framework that enables a focus for new investment and initiatives. This will support a broader and more holistic approach to research on dementia, addressing prevention, surveillance of population changes in risk and expression of dementia, the diagnostic process, diagnosis itself, interventions, social support, and care for people with dementia and their families.

Disponible en: https://onlinelibrary.wiley.com/doi/abs/10.1002/gps.4868

JOURNAL OF GERONTOLOGY

Low Alanine Aminotransferase Levels in the Elderly Population: Frailty, Disability, Sarcopenia, and Reduced Survival

Umberto Vespasiani-Gentilucci, Antonio De Vincentis, Luigi Ferrucci, Stefania Bandinelli, Raffaele Antonelli Incalzi, Antonio Picardi

Abstract

Background

Although low alanine aminotransferase (ALT) levels have been associated with poor outcomes in the elderly population, the determinants subtending this association have been poorly explored. To gain insight into this topic, we analyzed data from a prospective population-based database (InCHIANTI study) in which frailty, disability, sarcopenia, and pyridoxine levels were systematically assessed.

Methods

Data are from 765 participants aged more than 65 years (mean age 75.3 years, women 61.8%), without chronic liver disease, malignancies, or alcohol abuse. Frailty was defined according to Fried criteria, sarcopenia through peripheral Quantitative-Computed-Tomography (lowest gender-specific tertile of the residuals of a linear regression of muscle mass from height and fat mass), and disability as self-reported need for help in at least one basic daily living activity. Associations of ALT with overall and cardiovascular mortality were assessed by Cox-models with time-dependent covariates.

Results

ALT activity was inversely associated with frailty, sarcopenia, disability, and pyridoxine deficiency; however, higher ALT was confirmed to be protective with respect of overall and cardiovascular mortality even in multiple-adjusted models including all these covariates

(overall: hazard ratio [HR] 0.98 [0.96–1], p = .02; cardiovascular: 0.94 [0.9–0.98], p < .01). The association between ALT activity and mortality was nonlinear (J-shaped), and subjects in the lower quintiles of ALT levels showed a sharply increased overall and cardiovascular mortality.

Conclusions

These results suggest that reduced ALT levels in older individuals can be considered as a marker of frailty, disability, and sarcopenia, and as an independent predictor of adverse outcomes. The possible relationship between reduced ALT and impaired hepatic metabolic functions should be explored.

Disponible en: https://academic.oup.com/biomedgerontology/article-abstract/73/7/925/3871170?redirectedFrom=fulltext

AMERICAN JOURNAL OF HEALTH-SYSTEM PHARMACY

Promoting integration of pharmacy expertise in care of hospitalized patients with acute myocardial infarction

Leslie A. Curry, Marie A. Brault, Emily Cherlin and Marie Smith

Abstract

Purpose The substantive integration of pharmacists into quality-improvement initiatives aimed at improving the care of hospitalized patients with acute myocardial infarction (AMI) is described.

Methods A 2-year, mixed-methods, interventional study was conducted in 10 U.S. hospitals, directed at promoting the use of evidence-based strategies and fostering domains of hospital organizational culture associated with lower risk-standardized mortality rates (RSMRs) for patients with AMI. The adoption of 5 evidence-based strategies associated with reducing RSMRs for AMI was measured at baseline, 12, and 24 months. Data were collected via face-to-face interviews conducted at each hospital. Ethnographic observations were conducted at baseline and 18 months.

Results Significant changes in the use of evidence-based strategies were observed over the 2-year study period (p = 0.02), with the mean number of strategies used per hospital increasing from 2.4 at baseline to 3.9 at 24 months. Innovative approaches for integrating pharmacotherapy and pharmacy practice expertise included information technology solutions, targeted rounding for patients with AMI, medication-bridging programs, and education of patients with AMI.

Conclusion A mixed-methods interventional study in 10 hospitals examined the substantive integration of pharmacists into quality-improvement initiatives aimed at improving the care of patients with AMI. The investigation revealed the ability of this integration to meet clinical challenges by generating novel, feasible solutions that were tailored for specific hospital contexts. Inclusion of pharmacists strengthened relationships across disciplines and allowed pharmacists to become routinely embedded in broader quality efforts.

Disponible en: http://www.ajhp.org/content/75/13/962

EUROPEAN JOURNAL OF CLINICAL PHARMACY

Traumatic brain injury in elderly people attending a hospital emergency department: a descriptive study focusing on fall risk medication

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Abstract

Objectives: Traumatic brain injury due to falls accounts for a considerable number of attendances to the Emergency Department and leads a high morbidity. This study aimed to characterize traumatic brain injury in elderly patients, determining their causes, clinical management, consequences and related costs; and to identify associated risk factors, especially in relation to medication.

Method: Observational study including all patients aged ≥75 attended for traumatic brain injury during a year at the Emergency Department in Basurto University Hospital. Data was retrieved from electronic health records on: demographic characteristics, cause of the injury, comorbidities, polypharmacy, patient status on admission, laboratory tests and imaging, length-of-stay, destination on discharge and costs.

Results: A total of 859 patients were included (70.9% women, mean age 84.6 years). The cause of the injury was a fall in 83.1% of cases. The great majority of injuries were classified as mild, 96.8% obtaining a Glasgow Coma Score of 15. Almost three-quarters (72.1%) of patients were on multiple medications, taking a mean of 6.5 medications (SD: 3.2). Overall, 81.8% were taking at least one high fall-risk drug and 62.2% were taking a drug considered inappropriate by the STOPP criteria. The risk of hemorrhage was higher in patients who were taking anticoagulants (OR = 2.22; 95% CI: 1.14-4.19) and antiplatelets (OR = 1.74; 95% CI: 0.95-3.21). Total costs were €564,951; almost half of these costs (47.5%) were attributable to patients admitted to hospital wards.

Conclusions: Most patients attended for traumatic brain injury associated with falls are on polypharmacy, including fall-risk drugs and anticoagulants/antiplatelets that increase morbidity, so medication reviews should be conducted in coordination with primary care.

Disponible en: http://www.farmclin.com/seccion.asp?Id=8&articulo=1222

BRITISH JOURNAL OF CLINICAL PHARMACOLOGY

The relationship between frailty and polypharmacy in older people: A systematic review

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Abstract

Aims

Frailty is a complex geriatric syndrome resulting in decreased physiological reserves. Frailty and polypharmacy are common in older adults and the focus of extensive studies, although little is known about the impact they may have on each other. This is the first systematic review

analysing the available evidence on the relationship between frailty and polypharmacy in older adults.

Methods

Systematic review of quantitative studies. A comprehensive literature search for publications in English or Spanish was performed on MEDLINE, CINAHL, the Cochrane Database and PsycINFO in September 2017 without applying restrictions on the date of publication. Studies reporting any relationship between frailty and polypharmacy in older adults were considered.

Results

A total of 25 publications were included, all of them observational studies. Evaluation of Fried's frailty criteria was the most common approach, followed by the Edmonton Frail Scale and FRAIL scale. Sixteen of 18 cross-sectional analyses and five of seven longitudinal analyses demonstrated a significant association between an increased number of medications and frailty. The causal relationship is unclear and appears to be bidirectional. Our analysis of published data suggests that polypharmacy could be a major contributor to the development of frailty.

Conclusions

A reduction of polypharmacy could be a cautious strategy to prevent and manage frailty. Further research is needed to confirm the possible benefits of reducing polypharmacy in the development, reversion or delay of frailty.

Disponible en: https://bpspubs.onlinelibrary.wiley.com/doi/epdf/10.1111/bcp.13590

Pharmacological treatments for alleviating agitation in dementia: a systematic review and network meta-analysis

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Abstract

Aims

To determine the most efficacious and acceptable treatments of agitation in dementia.

Methods

MEDLINE, EMBASE, PsycINFO, CENTRAL and clinicaltrials.gov were searched up to 7 February 2017. Two independent reviewers selected randomized controlled trials (RCTs) of treatments to alleviate agitation in people with all-types dementia. Data were extracted using standardized forms and study quality was assessed using the revised Cochrane Risk of Bias Tool for RCTs. Data were pooled using meta-analysis. The primary outcome, efficacy, was 8-week response rates defined as a 50% reduction in baseline agitation score. The secondary outcome was treatment acceptability defined as treatment continuation for 8 weeks.

Results

Thirty-six RCTs comprising 5585 participants (30.9% male; mean ± standard deviation age, 81.8 ± 4.9 years) were included. Dextromethorphan/quinidine [odds ratio (OR) 3.04; 95% confidence interval (CI), 1.63–5.66], risperidone (OR 1.96; 95% CI, 1.49–2.59) and selective serotonin reuptake inhibitors as a class (OR 1.61; 95% CI, 1.02–2.53) were found to be significantly more efficacious than placebo. Haloperidol appeared less efficacious than nearly all comparators. Most treatments had noninferior treatment continuation compared to placebo, except oxcarbazepine, which was inferior. Findings were supported by subgroup and sensitivity analyses.

Conclusions
Risperidone, serotonin reuptake inhibitors as a class and dextromethorphan/quinidine demonstrated evidence of efficacy for agitation in dementia, although findings for dextromethorphan/quinidine were based on a single RCT. Our findings do not support prescribing haloperidol due to lack of efficacy, or oxcarbazepine due to lack of acceptability. The decision to prescribe should be based on comprehensive consideration of the benefits and risks, including those not evaluated in this meta-analysis.

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Reducing potentially inappropriate drug prescribing in nursing home residents: effectiveness of a geriatric intervention

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Abstract
Aims
Potentially inappropriate drug prescribing (PIDP) is frequent in nursing home (NH) residents. We aimed to investigate whether a geriatric intervention on quality of care reduced PIDP.
Methods
We performed an ancillary study within a multicentric individually-tailored controlled trial (IQUARE trial). All NH received a baseline and 18-month audit regarding drug prescriptions and other quality of care indicators. After the initial audit, NHs of the intervention group benefited of an in-site intervention (geriatric education for NH staff) provided by a geriatrician from the closest hospital. The analysis included 629 residents of 159 NHs. The main outcome was PIDP, defined as the presence of at least one of the following criteria: (i) drug with an unfavourable benefit-to-risk ratio; (ii) with questionable efficacy; (iii) absolute contraindication; (iv) significant drug-drug interaction. Multivariable multilevel logistic regression models were performed including residents and NH factors as confounders.
Results
PIDP was 65.2% (–3.6% from baseline) in the intervention group (n = 339) and 69.9% (–2.3%) in the control group (n = 290). The intervention significantly decreased PIDP [odds ratio (OR) = 0.63; 95% confidence interval 0.40–0.99], as a special care unit in NH (OR = 0.60; (0.42 to 0.85)), and a fall in the last 12 months (OR = 0.63; 0.44–0.90). Charlson Comorbidity Index [ORCCI = 1 vs. 0 = 1.38; 0.87–2.19, ORCCI ≥ 2 vs. 0 = 2.01; (1.31–3.08)] and psychiatric advice and/or hospitalization in a psychiatric unit (OR = 1.53; 1.07–2.18) increased the likelihood of PIDP.
Conclusion
This intervention based on a global geriatric education resulted in a significant reduction of PIDP at patient level.

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FARMACIA HOSPITALARIA

Impacto de la automatización en la seguridad de la dispensación de medicamentos a centros sociosanitarios

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Resumen
Objetivo: Comparar la incidencia y la gravedad de los errores de dispensación notificados cuando la dispensación a centros sociosanitarios se realiza con un sistema de pastilleros frente a un sistema automatizado de dispensación específicamente seleccionado.
Método: Estudio retrospectivo observacional pre-post en siete centros sociosanitarios geriátricos. Se comparan los errores de dispensación comunicados voluntariamente de dos periodos distintos: dispensación en pastilleros semanales (año 2013) y dispensación semanal con un sistema automatizado de dosificación personalizada Xana 4001U2 Tosho® para medicamentos orales sólidos, acompañada de dispensación manual para otras formas farmacéuticas (año 2015). Se analizan datos de funcionalidad, cognición y farmacológicos de los residentes atendidos en ambos periodos.
Resultados: La media de edad (83,9 y 83,6 años; p>0,05) y la función física (índice de Barthel 41,8 y 44,2; p>0,05) de los residentes fueron comparables, mientras que existieron diferencias estadísticamente significativas en la función cognitiva (MEC-35 20,3 y 21,7; p< 0,0,5). Se comunicaron 408 errores de dispensación con la dispensación manual, comparada con los 36 que se comunicaron con la dispensación automatizada, lo que supone una reducción relativa de un 91%. De estos errores, 43 frente a 6 alcanzaron al residente, respectivamente, y 5 errores frente a 1 requirieron al menos seguimiento.
Conclusiones: La implantación de un sistema automatizado de dosificación personalizada ha permitido mejorar significativamente la seguridad en la dispensación y posterior administración de medicamentos sólidos a centros sociosanitarios. La comunicación voluntaria de errores de medicación ha permitido comparar la seguridad en cuanto a la dispensación de dos sistemas diferentes de dispensación a centros sociosanitarios.

Disponible en: https://www.sefh.es/fh/171_10949esp20180410.pdf

Interacciones potenciales en una cohorte de pacientes VIH positivos de edad avanzada

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Resumen
Objetivo: El aumento de la esperanza de vida conduce a un nuevo modelo de paciente VIH positivo, con enfermedades crónicas y, en ocasiones, polimedicado. Pretendemos con este estudio conocer la complejidad de los tratamientos e identificar potenciales interacciones entre antirretrovirales y medicación domiciliaria de nuestros pacientes, con objeto de tenerlas identificadas y poder prevenirlas.
Método: Estudio descriptivo, retrospectivo, en una cohorte de pacientes con tratamiento antirretroviral mayores de 50 años en un hospital de tercer grado.

Resultados: Se incluyeron 242 pacientes, de los que 148 (61%) recibían algún otro tratamiento. Detectamos 243 potenciales interacciones: 197 consideradas moderadas y 46 graves; afectando a 110 pacientes. De las graves, 35 (76%) se relacionaron con inhibidores de proteasa potenciados. La principal consecuencia fue un aumento de las concentraciones plasmáticas del tratamiento domiciliario (48%). Las estatinas (24%) fueron el grupo especialmente implicado en las interacciones graves, seguidas de los corticoides inhalados (15%).
Conclusiones: Prácticamente la mitad de los pacientes estaban polimedicados, observándose un elevado número de potenciales interacciones moderadas o graves. El farmacéutico de hospital debe jugar un papel crucial en su detección, manejo y comunicación precoz.

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THE CONSULTANT PHARMACIST

Management of Breakthrough Pain in Hospitalized Older Adults

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Abstract
Objective: the appropriateness of analgesic administrations based on pain score and medication order in older adults during hospitalization was evaluated.
Setting: as-needed analgesic administrations for geriatric patients on hospitalist general medicine services at a large-university-affiliated medical center from january 1 to march 31, 2015, were included.
Practice description: the hospital is a level one trauma center with more than 500 beds serving an area of more than 500,000 people, 12% of whom are 65 years of age or older. At our institution, breakthrough pain is treated with as-needed analgesic medications based on pain scores specified by the ordering provider. Medication should be given according to which order contains the patient-reported severity of pain.
Practice innovation: this is an institutional review board-approved retrospective chart review of 430 analgesic medication administrations in hospitalized older adults.
Main outcome measurements: incidence of appropriate medication administration based on pain score report and active medication orders.
Results: as-needed analgesic medications were given appropriately 44% of the time based on patient-reported pain score and active medication order. An active medication order was missing to treat the pain score reported by the patient 29% of the time. Out of 430 analgesic administrations, improvement in pain occurred 26% of the time. Pain was reassessed one hour after administration for almost 33% of the orders. Of those, 73% showed an improvement in pain score.
Conclusion: our results demonstrate a large discrepancy for hospitalized older adults in what medication is administered compared with what is ordered for as-needed pain treatment. Missing orders contributed to almost one third of inappropriate medication administrations.

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PHARMACOEPIDEMIOLOGY AND DRUG SAFETY

Neuropathic pain is not adequately treated in the older general population: Results from the KORA F4 survey

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Abstract

Purpose

We evaluated the pharmacological treatment of distal sensorimotor polyneuropathy (DSPN) among older subjects from the general population.

Methods

The study included subjects aged 61 to 82 years from the KORA F4 survey (2006-2008). DSPN was defined as the presence of bilaterally impaired foot-vibration perception and/or bilaterally impaired foot-pressure sensation. Pain intensity was assessed with the painDETECT questionnaire.

Results

From the included 1076 older persons, 172 (16%) persons reported pain in the lower extremities and DSPN was present in 150 (14%) subjects. Forty-eight people with pain in the lower extremities reported DSPN. Only 38% of the subjects with DSPN reporting an average pain level of ≥4 during the past 4 weeks received medical treatment, predominantly nonsteroidal anti-inflammatory drugs (NSAIDs 20% and opioids 12%). The medication of choice for neuropathic pain, antidepressants, anticonvulsants, and opioids was relatively being underused. However, opioids and neuropathy preparations were prescribed preferably for subjects with painful DSPN.

Conclusions

In the older general population, only a small proportion of subjects with painful DSPN receive analgesic pharmacotherapy. Although not recommended by guidelines for the treatment of neuropathic pain, NSAIDs were the most frequently used class of analgesic drugs.

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Antihypertensive Medication Regimen Intensity and Incident Dementia in an Older Population

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Abstract

Objective

To investigate the association between antihypertensive medication regimen intensity and risk of incident dementia in an older population.

Design
Prospective, longitudinal cohort study.
Participants/Setting
A total of 1208 participants aged ≥78 years, free of dementia, and residing in central Stockholm at baseline (2001–2004).
Measurements
Participants were examined at 3- and 6-year follow-up to detect incident dementia. Data were collected through face-to-face interviews, clinical examinations, and laboratory tests. Data on antihypertensive use were obtained by a physician through patient self-report, visual inspection, or medical records. Cox proportional hazards models were used to compute hazard ratios (HRs) and 95% confidence intervals (CIs) for the association between time-varying antihypertensive regimen intensity and incident dementia after adjusting for potential confounders.
Results
During the follow-up period, 125 participants were diagnosed with dementia. Participants who developed dementia were more likely to have vascular disease at baseline (66.4% vs 55.3%, P = .02). In fully adjusted analyses, the number of antihypertensive classes (HR 0.68, 95% CI 0.55–0.84) and total prescribed daily dose (HR 0.70, 95% CI 0.57–0.86) were significantly associated with reduced dementia risk. After considering all-cause mortality as a competing risk, the number (HR 0.75, 95% CI 0.62–0.91) and doses (HR 0.71, 95% CI 0.59–0.86) of antihypertensive classes, and the independent use of diuretics (HR 0.66, 95% CI 0.44–0.99), were significantly associated with lower dementia risk.
Conclusions
Greater intensity of antihypertensive drug use among older people may be associated with reduced incidence of dementia.

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Antipsychotic Deprescription for Older Adults in Long-term Care: The HALT Study

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Abstract

Objectives
Despite limited efficacy and significant safety concerns, antipsychotic medications are frequently used to treat behavioral and psychological symptoms of dementia (BPSD) in long-term residential care. This study evaluates the sustained reduction of antipsychotic use for BPSD through a deprescribing intervention and education of health care professionals.
Design
Repeated-measures, longitudinal, single-arm study.
Setting
Long-term residential care of older adults.

Participants
Nursing staff from 23 nursing homes recruited 139 residents taking regular antipsychotic medication for ≥3 months, without primary psychotic illness, such as schizophrenia or bipolar disorder, or severe BPSD.
Intervention
An antipsychotic deprescribing protocol was established. Education of general practitioners, pharmacists, and residential care nurses focused on nonpharmacological prevention and management of BPSD.
Measurements
The primary outcome was antipsychotic use over 12-month follow-up; secondary outcomes were BPSD (Neuropsychiatric Inventory, Cohen-Mansfield Agitation Inventory, and social withdrawal) and adverse outcomes (falls, hospitalizations, and cognitive decline).
Results
The number of older adults on regular antipsychotics over 12 months reduced by 81.7% (95% confidence interval: 72.4-89.0). Withdrawal was not accompanied by drug substitution or a significant increase in pro-re-nata antipsychotic or benzodiazepine administration. There was no change in BPSD or in adverse outcomes.
Conclusion
In a selected sample of older adults living in long-term residential care, sustained reduction in regular antipsychotic use is feasible without an increase of BPSD.

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