

## REVISIÓN BIBLIOGRÁFICA ENERO 2020: Selección de artículos

## **REVISTAS GERIÁTRICAS**

### DRUGS AND AGING

## An Analysis of Real-World Data on the Safety of Etanercept in Older Patients with Rheumatoid Arthritis

Christopher J. Edwards rJack F. Bukowski Sara M. Burns Heather E. Jones Ron Pedersen Joan Sopczynski Lisa Marshall

#### Abstract

#### Objective

The aim of this study was to use real-world data to evaluate potential interactions between age, treatment, and the risk of developing four adverse events (AEs) common in the elderly: congestive heart failure, serious infections, non-melanoma skin cancer, and interstitial lung disease. These AEs were identified as important in a prior age-based analysis ( $\leq 65$  vs > 65 years) of etanercept- or placebo-treated patients with rheumatoid arthritis (RA) in controlled clinical trials.

#### Methods

Real-world data (1 January 2013 to 31 January 2018) were obtained from the IBM Watson Health MarketScan<sup>®</sup> Database. Patients were included if aged  $\geq$  18 years, enrolled for  $\geq$  1 year prior to RA diagnosis, and without any of the four AEs of interest prior to RA diagnosis or between RA diagnosis and first etanercept exposure. Logistic regression analysis was applied following propensity matching of patients receiving or not receiving etanercept based on age at diagnosis, age status at the beginning of observation (> 65 years or not), sex, geographic region, and follow-up duration.

#### Results

The overall cohort comprised 403,689 patients. The absolute risk of each of the four AEs increased with age. In propensity-matched cohorts, etanercept was associated with significantly higher odds of developing each of the four AEs (p < 0.001 for all). However, the relative risk of experiencing the four AEs in patients who received etanercept versus those who did not was similar between patients  $\leq$  65 years of age and those > 65 years of age.

#### Conclusions

In patients with RA, the relative increase in etanercept-associated risk of experiencing congestive heart failure, serious infection, non-melanoma skin cancer, or interstitial lung disease was similar between elderly and non-elderly.

Disponible en: https://link.springer.com/article/10.1007/s40266-019-00721-5



### AGE AND AGEING

## Investigation of a possible association of potentially inappropriate medication for older adults and frailty in a prospective cohort study from

#### Germany

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#### Abstract

#### Objective

Potentially inappropriate medications (PIMs) are commonly defined as drugs that should be avoided in older adults because they are considered to have a negative risk-benefit ratio. PIMs are suspected to increase the risk for frailty, but this has yet to be examined.

Design Prospective population-based cohort study.

**Setting and participants** A German cohort of community-dwelling older adults (≥60 years) was followed from October 2008 to September 2016.

#### Methods

In propensity score-adjusted logistic and Cox regression models, associations between baseline PIM use and prevalent/incident frailty were investigated. Frailty was assessed using the definition by Fried and co-workers, PIM were defined with the 2015 BEERS criteria, the BEERS criteria to avoid in cognitively impaired patients (BEERS dementia PIM), the EU(7)-PIM and the PRISCUS list.

#### Results

Of 2,865 participants, 261 were frail at baseline and 423 became frail during follow-up. Only BEERS dementia PIM use was statistically significantly associated with prevalent frailty (odds ratio (95% confidence interval), 1.51 (1.04–2.17)). The strength of the association was comparable for all frailty components. Similarly, in longitudinal analyses, only BEERS dementia PIM use was associated with incident frailty albeit not statistically significant (hazard ratio, 1.19 (0.84–1.68)).

#### Conclusions

The association of PIM use and frailty seems to be restricted to drug classes, which can induce frailty symptoms (anticholinergics, benzodiazepines, z-substances and antipsychotics). Physicians are advised to perform frailty assessments before and after prescribing these drug classes to older patients and to reconsider treatment decisions in case of negative performance changes.

#### Disponible

en:

https://watermark.silverchair.com/afz127.pdf?token=AQECAHi208BE49Ooan9kkhW\_Ercy7Dm3ZL\_9Cf3gfKAc485ysgAAAlwwggJYBgkqhkiG9w0BBwaggg JJMIICRQIBADCCAj4GCSqGSIb3DQEHATAeBglghkgBZQMEAS4wEQQMw-0vwPFfan5GZnv-AgEQgIICD1VRU9bS0YDKfOEgVSZrCmKUUfuIN8RklgKDGqI30lcXXg5Wg7F\_sD2xCEyFAXgtk0ClmmNIZk5CqHKAANtEjLIPdYBe64IU3fd4fNxvY40T79lfu8qXzZ rbNoBOmDOgq5S1whD1WJoeok1NMo\_aSQFoJsX6qMRDM6cNgBuSQsjLrBIm7QleMcRB00EGsDC8rRA3hukq5wEpVG2zeunPwFdERA868MH0sJLWtqAFju AHXG5QInwFXKT4TIdyHnEvfmnnvzFYCQLPcmFGo-NIIh-6fXrEoNd0\_geL-TDf18173guGLTYA0LFWXwvE9ioPK6ELWSi140PwdVbfleeS44ZGgieyIXTNrRQibeFK0xA7xl6JsaL2y6vc0PyFWSsfdiQ\_5jvzlvs30iooSFipDpgDPVaakR2JOWDhHi VQxJjC8v5kAmeJnU1ahJT1yGjUReSiAXAfTiCAHSrHAJu4r4sCgIKL0vEfsCr\_2sGvazKe1MU3JTKJ2T5jX8PU6rfFx\_fl2L2fEsoOU6ysEWn4PxjWzVyR3c1pLNXq7DL3MVNDsU5HI9IGw7wacm2RW w58t8qVpMDDJ04MIKDAG6imuwY-60g4FbLbHatCmdhN3tdL8K1rhZc3PzoxrSb1eRzyjojD56qMVf-SReVpAAjrpIS7hzmTqTJYax0XICrpsB-QwBSI3L4LcrS69zJy-HE6



## ARCHIVES OF GERONTOLOGY AND GERIATRICS

## The effect of protein supplements on functional frailty in older persons: A systematic review and meta-analysis

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#### Abstract

#### Background

The effect of protein supplementation in attenuating loss of muscle mass, strength and function in community-dwelling older people has been promising, however, its benefits in prefrail and frail older people remains unclear.

#### Objective

To determine the effect of protein supplementation on muscle mass, strength and function in frail older people by reviewing and conducting meta-analysis of relevant randomized controlled trials (RCTs).

#### Design

This review was registered at PROSPERO (CRD42017079276) and conducted according to Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) guidelines. Using a pre-determined e-search strategy, we searched PubMed, Medline, EMBASE, CINAHL, LILACS, Web of Science, Cochrane and Scopus databases. Inclusion criteria were RCTs that assessed the effect of protein supplementation on muscle mass, strength and function in frail individuals aged  $\geq$ 65 years. The main outcomes were lean body mass (LBM), handgrip, leg extension, leg press strength, short physical performance battery (SPPB) score, and gait velocity.

#### Results

Of the eight studies included in this review, 503 subjects were enrolled and four different protein supplements were assessed. Despite the variation in methodology, studies were homogenous with I-squared <10.0%. The meta-analysis showed no significant effect of protein supplementation on LBM (mean difference 1.17 kg, 95% CI: -1.97-4.3), handgrip (mean difference 0.15, 95% CI: -0.95-1.24), leg extension (mean difference -3.68 kg, 95% CI: -12.72-5.36), leg press (mean standardized difference 0.26 kg, 95% CI: -0.30-0.82), SPPB (mean difference 0.61, 95% CI: -0.02-1.23), or gait velocity (mean difference -0.20 m/s, 95% CI: -0.95-0.55).

#### Conclusion

Protein supplementation alone does not significantly improve muscle mass, strength or function in pre-frail or frail older people.

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https://reader.elsevier.com/reader/sd/pii/S0167494319301815?token=EC0DB897AB9C6AF8 DDE65801719B4B36A7A9BD072367229B79F91EA3CC9BEF2670C77C2A46EE6B8DEF35A520 39916C04



#### Frequency and Predictors of Polypharmacy in US Medicare Patients: A Cross-Sectional Analysis at the Patient and Physician Levels

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#### Abstract

#### Background

Polypharmacy in older patients increases the risk of medication-related adverse events and can be a marker of unnecessary care.

#### Objectives

The aim of this study was to describe the frequency of polypharmacy among patients 65 years of age or older and identify factors associated with the occurrence of patient-level and physician-level polypharmacy.

#### Methods

We performed a cross-sectional analysis of 100% Medicare claims data from January 1, 2016 to December 31, 2016. All patients with continuous Medicare coverage (Parts A, B, and D) throughout 2016 who were 65 years of age or older and who were prescribed at least one medication for at least 30 days were included in the analysis. Each patient was attributed to the primary care physician who prescribed them the most medications. Physicians treating fewer than ten patients were excluded. We defined polypharmacy based on the highest number of concurrent medications at any point during the year. We used hierarchical linear regression to study patient- and physician-level characteristics associated with high prescribing rates.

#### Results

We identified 25,747,560 patients attributed to 147,879 primary care physicians. The patientlevel mean [standard deviation (SD)] concurrent medication rate was 5.6 (3.3), and the physician-level mean (SD) was 5.6 (1.1). A total of 6108 physicians (4.1% of sample) had a mean concurrent number of medications greater than two SDs above the physician-level mean. At the patient level in the adjusted model, a history of HIV/AIDS, diabetes mellitus, solid organ transplant, and systolic heart failure were the comorbidities most strongly associated with polypharmacy. The relative difference in number of medications associated with these comorbidities were 1.89, 1.39, 1.32, and 1.06, respectively. At the physician level, increased time since medical school graduation and smaller practice size were associated with lower rates of polypharmacy.

#### Conclusions

Patterns of high prescribing to older patients is common and measurable at the physician level. Addressing high outlier prescribers may represent an opportunity to reduce avoidable harm and excessive costs.

Disponible en: https://link.springer.com/article/10.1007/s40266-019-00726-0



## **REVISTA ESPAÑOLA DE GERIATRÍA Y GERONTOLOGÍA**

#### Diabetes mellitus y riesgo de fractura de cadera. Revisión sistemática

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#### RESUMEN

#### Antecedentes y objetivo

Se ha descrito que el riesgo de fractura en pacientes con diabetes mellitus (DM) esta aumentado. Nuestro objetivo fue investigar la posible asociación entre DM y fractura de cadera y los factores de riesgo asociados mediante una revisión sistemática de la literatura.

#### Métodos

Para identificar los estudios relevantes publicados desde enero de 2001 hasta agosto de 2018 se utilizaron las bases PubMed y SCOPUS. Se seleccionaron los estudios en los cuales se evidenciaba el riesgo estimado de fractura de cadera comparando grupos de pacientes diabéticos con no diabéticos. También se seleccionaron los estudios que investigaban los posibles factores de riesgo para dicha asociación.

#### Resultados

Se evaluaron un total de 27 artículos que cumplían los criterios de inclusión. Se observó una asociación entre DM y fractura de cadera en mujeres y hombres diabéticos con respecto a aquellos individuos no diabéticos. En cuanto a los factores de riesgo detectados, los más importantes fueron que la DM fuese de tipo 1, asociado probablemente a una mayor duración de la misma DM, y el ser mujer.

#### Conclusiones

Existe un riesgo aumentado de tener una fractura de cadera en los pacientes diagnosticados de DM. Esta asociación es más importante en los pacientes con DM tipo 1 y en las mujeres.

Disponible en: <u>https://www.elsevier.es/es-revista-revista-espanola-geriatria-gerontologia-124-articulo-diabetes-mellitus-riesgo-fractura-cadera--S0211139X19301507</u>



## **REVISTAS FARMACÉUTICAS**

# THE SENIOR CARE PHARMACIST (AMERICAN SOCIETY OF CONSULTANT PHARMACISTS)

#### Management of Hepatitis C in the Older Adult

Chahine, Elias B.; Guirguis, Erenie H.; Derrick, Caroline B.

#### Abstract

#### Background

To provide a review of the epidemiology, clinical presentation, screening, diagnosis, treatment, and prevention of hepatitis C with an emphasis on older adults

#### Methods

PubMed and Google Scholar were searched for relevant literature using a combination of the following terms: hepatitis C, epidemiology, hepatitis C virus (HCV), diagnosis, treatment, directacting antivirals (DAAs), and older adults. In addition, websites of the hepatitis C guidelines, Centers for Disease Control and Prevention (CDC), and manufacturers of DAAs were also reviewed for relevant information. (The authors reviewed the literature through May 2019. STUDY SELECTION/DATA EXTRACTION: The key resources reviewed were the CDC website, American Association for the Study of Liver Diseases/Infectious Diseases Society of America hepatitis C guidelines, prescribing information of DAAs, and pivotal clinical trials of DAAs.

#### Results

Hepatitis C disproportionately affects baby boomers and people who inject drugs (PWID). CDC recommends screening adults born from 1945 to 1965 and high-risk patients for the presence of hepatitis C antibody. The goal of therapy is to achieve sustained virologic response, defined as undetectable HCV ribonucleic acid 12 weeks after treatment completion. Treatment for those who are treatment-naive with or without compensated cirrhosis consists of administration of DAAs orally for 8 to 12 weeks. Regimen selection depends on HCV genotype, presence or absence of cirrhosis, comorbid conditions, and concurrent medications. Currently recommended DAAs are highly effective, well tolerated, and can be associated with significant drug interactions particularly in older adults. Access to DAAs remains an obstacle for many patients.

#### Conclusion

Hepatitis C is common among baby boomers and PWID. Screening is recommended in these patient populations. Treatment with DAAs is curative and well tolerated

Disponible en:

https://www.ingentaconnect.com/contentone/ascp/tscp/2020/00000035/00000001/art00004



## **REVISTAS DE MEDICINA GENERAL**

## JAMA INTERNAL MEDICINE

#### Effect of the Tailored, Family-Involved Hospital Elder Life Program on Postoperative Delirium and Function in Older Adults. A Randomized Clinical Trial

Yan-Yan Wang, Ji-Rong Yue, Dong-Mei Xie, et al

#### Abstract

**Importance** Postoperative delirium (POD) is a common condition for older adults, contributing to their functional decline.

**Objective** To investigate the effectiveness of the Tailored, Family-Involved Hospital Elder Life Program (t-HELP) for preventing POD and functional decline in older patients after a noncardiac surgical procedure.

**Design, Setting, and Participants** A 2-arm, parallel-group, single-blind, cluster randomized clinical trial was conducted from August 24, 2015, to February 28, 2016, on 6 surgical floors (gastric, colorectal, pancreatic, biliary, thoracic, and thyroid) of West China Hospital in Chengdu, China. Eligible participants (n = 281) admitted to each of the 6 surgical floors were randomized into a nursing unit providing t-HELP (intervention group) or a nursing unit providing usual care (control group). All randomized patients were included in the intention-to-treat analyses for the primary outcome of POD incidence. Statistical analysis was performed from April 3, 2016, to December 30, 2017.

**Interventions** In addition to receiving usual care, all participants in the intervention group received the t-HELP protocols, which addressed each patient's risk factor profile. Besides nursing professionals, family members and paid caregivers were involved in the delivery of many of the program interventions.

**Main Outcomes and Measures** The primary outcome was the incidence of POD, evaluated with the Confusion Assessment Method. Secondary outcomes included the pattern of functional and cognitive changes (activities of daily living [ADLs], instrumental activities of daily living [IADLs], Short Portable Mental Status Questionnaire [SPMSQ]) from hospital admission to 30 days after discharge, and the length of hospital stay (LOS).

**Results** Of the 475 patients screened for eligibility, 281 (171 [60.9%] male, mean [SD] age 74.7 [5.2] years) were enrolled and randomized to receive t-HELP (n = 152) or usual care (n = 129). Postoperative delirium occurred in 4 participants (2.6%) in the intervention group and in 25 (19.4%) in the control group, with a relative risk of 0.14 (95% CI, 0.05-0.38). The number needed to treat to prevent 1 case of POD was 5.9 (95% CI, 4.2-11.1). Participants in the intervention group compared with the control group showed less decline in physical function (median [interquartile range] for ADLs: -5 [-10 to 0] vs -20 [-30 to -10]; P < .001; for IADLs: -2 [-2 to 0] vs -4 [-4 to -2]; P < .001) and cognitive function (for the SPMSQ level: 1 [0.8%] vs 8 [7.0%]; P = .009) at discharge, as well as shorter mean (SD) LOS (12.15 [3.78] days vs 16.41 [4.69] days; P < .001).

**Conclusions and Relevance** The findings suggest that t-HELP, with family involvement at its core, is effective in reducing POD for older patients, maintaining or improving their physical and cognitive functions, and shortening the LOS. The results of this t-HELP trial may improve generalizability and increase the implementation of this program.

**Trial Registration** Chinese Clinical Trial Registry Identifier: ChiCTR-POR-15006944 Disponible en: <u>https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2753259</u>



### **NEW ENGLAND JOURNAL OF MEDICINE**

#### Efficacy and Safety of Low-Dose Colchicine after Myocardial Infarction

Jean-Claude Tardif, Simon Kouz, David D. Waters, Olivier F. Bertrand, Rafael Diaz, Aldo P. Maggioni, Fausto J. Pinto, Reda Ibrahim, Habib Gamra, Ghassan S. Kiwan, Colin Berry, José López-Sendón, et al.

#### Abstract

#### BACKGROUND

Experimental and clinical evidence supports the role of inflammation in atherosclerosis and its complications. Colchicine is an orally administered, potent antiinflammatory medication that is indicated for the treatment of gout and pericarditis.

#### METHODS

We performed a randomized, double-blind trial involving patients recruited within 30 days after a myocardial infarction. The patients were randomly assigned to receive either low-dose colchicine (0.5 mg once daily) or placebo. The primary efficacy end point was a composite of death from cardiovascular causes, resuscitated cardiac arrest, myocardial infarction, stroke, or urgent hospitalization for angina leading to coronary revascularization. The components of the primary end point and safety were also assessed.

#### RESULTS

A total of 4745 patients were enrolled; 2366 patients were assigned to the colchicine group, and 2379 to the placebo group. Patients were followed for a median of 22.6 months. The primary end point occurred in 5.5% of the patients in the colchicine group, as compared with 7.1% of those in the placebo group (hazard ratio, 0.77; 95% confidence interval [CI], 0.61 to 0.96; P=0.02). The hazard ratios were 0.84 (95% CI, 0.46 to 1.52) for death from cardiovascular causes, 0.83 (95% CI, 0.25 to 2.73) for resuscitated cardiac arrest, 0.91 (95% CI, 0.68 to 1.21) for myocardial infarction, 0.26 (95% CI, 0.10 to 0.70) for stroke, and 0.50 (95% CI, 0.31 to 0.81) for urgent hospitalization for angina leading to coronary revascularization. Diarrhea was reported in 9.7% of the patients in the colchicine group and in 8.9% of those in the placebo group (P=0.35). Pneumonia was reported as a serious adverse event in 0.9% of the patients in the colchicine group and in 0.4% of those in the placebo group (P=0.03).

#### CONCLUSIONS

Among patients with a recent myocardial infarction, colchicine at a dose of 0.5 mg daily led to a significantly lower risk of ischemic cardiovascular events than placebo.

(Funded by the Government of Quebec and others; COLCOT ClinicalTrials.gov number, NCT02551094. opens in new tab.)

Disponible en: https://www.nejm.org/doi/full/10.1056/NEJMoa1912388