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REVISIÓN BIBLIOGRÁFICA MARZO 2020: Selección de artículos

REVISTAS GERIÁTRICAS

DRUGS AND AGING

The Safety and Tolerability of Statin Therapy in Primary Prevention in Older Adults: A Systematic Review and Meta-analysis

Zhen Zhou, Loai Albarqouni, Andrea J. Curtis, Monique Breslin & Mark Nelson

Abstract

Purpose

The use of statins in the primary prevention of cardiovascular disease (CVD) is increasing in older adults. Nonetheless, good clinical evidence for the safety and tolerability of statins in this population is limited.

Objective

We aimed to evaluate the safety and tolerability of statins in older adults without overt CVD, focusing on statin-related muscle symptoms.

Methods

Double-blinded randomised controlled trials (RCTs) of statins published before January 2012 were identified from a Cochrane review updated to 2012. Trials published between January 2012 and July 2018 were identified through the CENTRAL, MEDLINE and EMBASE databases. Eligible trials were limited to those including individuals aged ≥ 65 years without overt CVD, who were followed for at least 1 year. Trials had to have reported at least one of the outcomes of interest. Pooled relative risk (RR) estimates and 95% confidence intervals (CIs) were calculated using random-effects models.

Results

We identified 11 trials, including 18,192 participants (mean age 73.7 years; 43% females). Compared with placebo, statins neither increased the risks of muscle-related symptoms (RR 1.01; 95% CI 0.90–1.12), total adverse events (AEs) and serious AEs nor led to more total permanent treatment discontinuations and discontinuations due to AEs or specifically due to muscle-related symptoms. No evidence of heterogeneity was observed in any of these outcomes.

Conclusions

This meta-analysis of RCTs found no excess incidence of muscle-related symptoms, total AEs, serious AEs and treatment discontinuations attributable to statin treatment compared with placebo among older adults without CVD.

Disponible en: https://link.springer.com/article/10.1007/s40266-019-00736-y

The Association Between Drug Burden Index (DBI) and Health-Related Outcomes: A Longitudinal Study of the 'Oldest Old' (LiLACS NZ)

Karen Cardwell, Ngaire Kerse, Cristín Ryan, Ruth Teh, Simon A. Moyes, Oliver Menzies, Anna Rolleston, Joanna Broad & Carmel M. Hughes

Abstract

Background

The prescribing of medications with anticholinergic and/or sedative properties is considered potentially inappropriate in older people (due to their side-effect profile), and the Drug Burden Index (DBI) is an evidence-based tool which measures exposure to these medications. Life and Living in Advanced Age: a Cohort Study in New Zealand (LiLACS NZ) is an ongoing longitudinal study investigating the determinants of healthy ageing. Using data from LiLACS NZ, this study aimed to determine whether a higher DBI was associated with poorer outcomes (hospitalisation, falls, mortality and cognitive function and functional status) over 36 months follow-up.

Methods

LiLACS NZ consists of two cohorts: Māori (the indigenous population of New Zealand) aged ≥ 80 years and non-Māori aged 85 years at the time of enrolment. Data relating to regularly prescribed medications at baseline, 12 months and 24 months were used in this study. Medications with anticholinergic and/or sedative properties (i.e. medications with a DBI > 0) were identified using the Monthly Index of Medical Specialities (MIMS) medication formulary, New Zealand. DBI was calculated for everyone enrolled at each time point. The association between DBI at baseline and outcomes was evaluated throughout a series of 12-month follow-ups using negative binomial (hospitalisations and falls), Cox (mortality) and linear (cognitive function and functional status) regression analyses (significance $p < 0.05$). Regression models were adjusted for age, gender, general practitioner (GP) visits, socioeconomic deprivation, number of medicines prescribed and one of the following: prior hospitalisation, history of falls, baseline cognitive function [Modified Mini-Mental State Examination (3MS)] or baseline functional status [Nottingham Extended Activities of Daily Living (NEADL)].

Results

Full demographic data were obtained for 671, 510 and 403 individuals at baseline, 12 months and 24 months, respectively. Overall, 31%, 30% and 34% of individuals were prescribed a medication with a DBI > 0 at baseline, 12 months and 24 months, respectively. At baseline and 12 months, non-Māori had a greater mean DBI (0.28 ± 0.5 and 0.27 ± 0.5, respectively) compared to Māori (0.16 ± 0.3 and 0.18 ± 0.5, respectively). At baseline, the most commonly prescribed medicines with a DBI > 0 were zopiclone, doxazosin, amitriptyline and codeine. In Māori, a higher DBI was significantly associated with a greater risk of mortality: at 36 months follow-up, adjusted hazard ratio [95% confidence interval (CI)] 1.89 (1.11–3.20), p = 0.02. In non-Māori, a higher DBI was significantly associated with a greater risk of mortality [at 12 months follow-up, adjusted hazard ratio (95% CIs) 2.26 (1.09–4.70), p = 0.03] and impaired cognitive function [at 24 months follow-up, adjusted mean difference in 3MS score (95% CIs) 0.89 (− 3.89 to − 0.41), p = 0.02).

Conclusions

Using data from LiLACS NZ, a higher DBI was significantly associated with a greater risk of mortality (in Māori and non-Māori) and impaired cognitive function (in non-Māori). This highlights the importance of employing strategies to manage the prescribing of medications with a DBI > 0 in older adults.

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JOURNAL OF CLINICAL INTERVENTIONS IN AGING

Potentially Inappropriate Prescriptions in Ambulatory Elderly Patients Living in Rural Areas of Romania Using STOPP/START (Version 2) Criteria

Valentina Buda, Andreea Prelipcean, Minodora Andor, Liana Dehelean, Olivia Dalleur,Simona Buda,Lavinia Spatar Maria Cristiana Mabda, Maria Suciu,1 Corina Danciu, Anca Tudor, Lucian Petrescu,Carmen Cristescu

Background:

Rational use of medications and monitoring of prescriptions in elderly patients is important to decrease the number and duration of hospitalizations, emergency medical consultations, mortality, as well as medical costs.

Purpose:

To identify potentially inappropriate medications (PIMs) and potential prescription omissions (PPOs), and determine their prevalence based on the Screening Tool of Older Persons' potentially inappropriate Prescriptions (STOPP) v2 criteria and Screening Tool to Alert doctors to Right Treatment (START) v2 criteria for patients aged > 65 years.

Methods:

This cross-sectional study was conducted in two rural counties in Romania based on electronic prescriptions for chronic conditions (EPCCs) issued from 30 days to 90 days by a specialist or general practitioner. Collected EPCCs were evaluated by an interdisciplinary team of specialists based on 26 STOPP v2 criteria and 10 START v2 criteria.

Results:

PIM prevalence was 25.80% and PPO prevalence was 41.72% for 646 EPCCs. The mean age of patients was 75 years and the mean number of drugs per EPCC was four. The most frequently identified PIMs were treatment duration (6.65%), theophylline administration (5.72%), drug indication (4.64%), cyclo-oxygenase-2 non-steroidal anti-inflammatory drugs (1.39%), and zopiclone prescription (0.77%). Statins (24.76%), beta-blockers (8.04%), and beta-2 agonist/antimuscarinic bronchodilators (5.88%) were the most frequently identified PPOs.

Conclusion:

PPOs were more prevalent than PIMs for elderly populations living in the two rural counties in Romania we studied. Health practitioners (family physicians, specialists, and pharmacists) should focus on prophylactic and curative considerations when prescribing agents to decrease the morbidity and mortality of elderly rural Romanian patients.

Disponible en: https://www.dovepress.com/potentially-inappropriate-prescriptions-in-ambulatory-elderly-patients-peer-reviewed-article-CIA

REVISTAS DE MEDICINA GENERAL

NEJM: NEW ENGLAND OF JOURNAL MEDICINE

Epidemiology of Covid-19 in a Long-Term Care Facility in King County, Washington

Temet M. McMichael, Ph.D., Dustin W. Currie, Ph.D., Shauna Clark, R.N., Sargis Pogosjans, M.P.H., Meagan Kay, D.V.M., Noah G. Schwartz, M.D., James Lewis, M.D., Atar Baer, Ph.D., Vance Kawakami, D.V.M., Margaret D. Lukoff, M.D., Jessica Ferro, M.P.H., Claire Brostrom-Smith, M.S.N., et al., for the Public Health–Seattle and King County, EvergreenHealth, and CDC COVID-19 Investigation Team

BACKGROUND

Long-term care facilities are high-risk settings for severe outcomes from outbreaks of Covid-19, owing to both the advanced age and frequent chronic underlying health conditions of the residents and the movement of health care personnel among facilities in a region.

METHODS

After identification on February 28, 2020, of a confirmed case of Covid-19 in a skilled nursing facility in King County, Washington, Public Health–Seattle and King County, aided by the Centers for Disease Control and Prevention, launched a case investigation, contact tracing, quarantine of exposed persons, isolation of confirmed and suspected cases, and on-site enhancement of infection prevention and control.

RESULTS

As of March 18, a total of 167 confirmed cases of Covid-19 affecting 101 residents, 50 health care personnel, and 16 visitors were found to be epidemiologically linked to the facility. Most cases among residents included respiratory illness consistent with Covid-19; however, in 7 residents no symptoms were documented. Hospitalization rates for facility residents, visitors, and staff were 54.5%, 50.0%, and 6.0%, respectively. The case fatality rate for residents was 33.7% (34 of 101). As of March 18, a total of 30 long-term care facilities with at least one confirmed case of Covid-19 had been identified in King County.

CONCLUSIONS

In the context of rapidly escalating Covid-19 outbreaks, proactive steps by long-term care facilities to identify and exclude potentially infected staff and visitors, actively monitor for potentially infected patients, and implement appropriate infection prevention and control measures are needed to prevent the introduction of Covid-19.

Disponible en: https://www.nejm.org/doi/full/10.1056/NEJMoa2005412

JAMDA: JOURNAL OF THE AMERICAN MEDICAL DIRECTORS ASSOCIATION

Vitamin K Antagonists and Direct Oral Anticoagulants in Nonagenarian Patients With Atrial Fibrillation

Sergio Raposeiras-Roubín, MD, PhDa,⁎,'Correspondence information about the author MD, PhD Sergio Raposeiras-RoubínEmail the author MD, PhD Sergio Raposeiras-Roubín, David Alonso Rodríguez, MD, PhDb, Santiago Jesús Camacho Freire, MDc, Emad Abu-Assi, MD, PhDa, Rafael Cobas-Paz, MDa, Carlos Rodríguez Pascual, MD, PhDd, Julio García Comesaña, MDe, Alberto González-Carrero López, MDf, Naiara Cubelos Fernández, MDb, Álvaro López-Masjuán Ríos, MDc, María Cespón-Fernández, MDa, Isabel Muñoz-Pousa, MDa, Berenice Caneiro-Queija, MDa, Adrián Rodríguez Albarrán, MDc, Sara Álvarez Castañera, MDb, Julia Verísimo Guillén, MDd, Alberto Carpintero Vara, MDd, Cristina Barreiro Pardal, MD, PhDa, Pablo Domínguez-Erquicia, MDa, Luis Manuel Domínguez-Rodríguez, MDa, José Francisco Díaz Fernández, MDc, Felipe Fernández Vázquez, MD, PhDb, Andrés Iñíguez-Romo, MD, PhDa

Abstract

Objectives

Abstract. Objectives

Nonagenarian patients are underrepresented in clinical trials that have evaluated oral anticoagulation in patients with atrial fibrillation (AF). The aim of this study was to assess the pronostic impact of oral anticoagulation in patients with AF age ≥90 years.

Design

Retrospective multicenter study of nonagenarian patients with AF.

Setting and participants

A total of 1750 nonagenarian inpatients and outpatients with nonvalvular AF between January 2013 and December 2018 in 3 Spanish health areas were studied.

Methods

Patients were divided into 3 groups based on antithrombotic therapy: nonoral anticoagulants (30.5%), vitamin-K antagonists (VKAs; 28.6%), and direct oral anticoagulants (DOACs; 40.9%). During a mean follow-up of 23.6 ± 6.6 months, efficacy outcomes (death and embolic events) were evaluated using a Cox regression analysis and safety outcomes (bleeding requiring hospitalization) by competing-risk regression. Results were complemented with a propensity score matching analysis.

Results

During follow-up, 988 patients died (56.5%), 180 had embolic events (10.3%), and 186 had major bleeding (10.6%). After multivariable adjustment, DOACs were associated with a lower risk of death and embolic events than nonanticoagulation [hazard ratio (HR) 0.75, 95% confidence interval (CI)] 0.61–0.92), but VKAs were not (HR 0.87, 95% CI 0.72–1.05). These results were confirmed after propensity score matching analysis. For bleeding, both DOACs and VKAs proved to be associated with a higher risk (HR for DOAC 1.43; 95% CI 0.97–2.13; HR for VKA 1.94; 95% CI 1.31–2.88), although findings for DOACs were not statistically significant (P =
.074). For intracranial hemorrhage (ICH), only VKAs—not DOACs—presented a higher risk of ICH (HR 4.43; 95% CI 1.48–13.31).

Conclusions and implications

In nonagenarian patients with AF, DOACs led to a reduction in mortality and embolic events in comparison with nonanticoagulation. This reduction was not observed with VKAs. Although both DOACs and VKAs increased the risk of bleeding, only VKAs were associated with higher ICH rates.

Disponible en: https://www.jamda.com/article/S1525-8610(19)30650-4/fulltext

ANNALS OF INTERNAL MEDICINE

The Effect of Influenza Vaccination for the Elderly on Hospitalization and Mortality: An Observational Study With a Regression Discontinuity Design

Michael L. Anderson, PhD; Carlos Dobkin, PhD; Devon Gorry, PhD

Abstract

Background

Observational studies using traditional research designs suggest that influenza vaccination reduces hospitalizations and mortality among elderly persons. Accordingly, health authorities in some countries prioritize vaccination of this population. Nevertheless, questions remain about this policy's effectiveness given the potential for bias and confounding in observational data.

Objective:

To determine the effectiveness of the influenza vaccine in reducing hospitalizations and mortality among elderly persons by using an observational research design that reduces the possibility of bias and confounding.

Design:

A regression discontinuity design was applied to the sharp change in vaccination rate at age 65 years that resulted from an age-based vaccination policy in the United Kingdom. In this design, comparisons were limited to individuals who were near the age-65 threshold and were thus plausibly similar along most dimensions except vaccination rate.

Setting:

England and Wales.

Participants:

Adults aged 55 to 75 years residing in the study area during 2000 to 2014.

Intervention:

Seasonal influenza vaccine.

Measurements:

Hospitalization and mortality rates by month of age.

Results:

The data included 170 million episodes of care and 7.6 million deaths. Turning 65 was associated with a statistically and clinically significant increase in rate of seasonal influenza vaccination. However, no evidence indicated that vaccination reduced hospitalizations or mortality among elderly persons. The estimates were precise enough to rule out results from many previous studies.

Limitation:

The study relied on observational data, and its focus was limited to individuals near age 65 years.

Conclusion:

Current vaccination strategies prioritizing elderly persons may be less effective than believed at reducing serious morbidity and mortality in this population, which suggests that supplementary strategies may be necessary.

Disponible en: https://annals.org/aim/article-abstract/2762506/effect-influenza-vaccination-elderly-hospitalization-mortality-observational-study-regression-discontinuity

JAMA INTERNAL MEDICINE

The age-adjusted Charlson comorbidity index: A significant predictor of clinical outcome in patients with heart failure

Mony Shuvya,, Donna R. Zwasa, Andre Kerena, Israel Gotsman

Abstract

Heart failure (HF) has emerged as a major epidemic and a significant public health burden, associated with considerable morbidity and mortality. Parameters specific for HF such as NYHA class and left ventricle ejection fraction are important predictors of clinical outcome in HF, patients with HF typically have multiple comorbid conditions that complicate management and adversely affect clinical outcome. The impact of comorbid burden can be assessed by the Carlson comorbidity index (CCI), a validated score to estimate mortality in patients with multiple comorbidities [4]. It quantifies the impact of 17 comorbidities based on their number and individual prognostic impact by means of a score. The age-adjusted CCI (ACCI) incorporatin age into the score was validated for predicting survival based on comorbidities [5]. There is very limited data regarding the ACCI in patients with chronic HF. The purpose of the present study was to evaluate the burden of comorbidities as assessed by the ACCI and its predictive value

Disponible en: https://www.ejinme.com/current