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REVISIÓN BIBLIOGRÁFICA MARZO 2021:
Selección de artículos

REVISTAS GERIÁTRICAS

BMC Geriatrics

Frailty status as a potential factor in increased postoperative opioid use in older adults

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Background

Prescription opioids are commonly used for postoperative pain relief in older adults, but have the potential for misuse. Both opioid side effects and uncontrolled pain have detrimental impacts.
Frailty syndrome (reduced reserve in response to stressors), pain, and chronic opioid consumption are all complex phenomena that impair function, nutrition, psychologic well-being, and increase mortality, but links among these conditions in the acute postoperative setting have not been described. This study seeks to understand the relationship between frailty and patterns of postoperative opioid consumption in older adults.

Methods

Patients ≥ 65 years undergoing elective surgery with a planned hospital stay of at least one postoperative day were recruited for this cohort study at pre-anesthesia clinic visits.
Preoperatively, frailty was assessed by Edmonton Frailty and Clinical Frailty Scales, pain was assessed by Visual Analog and Pain Catastrophizing Scales, and opioid consumption was recorded. On the day of surgery and subsequent hospitalization days, average pain ratings and total opioid consumption were recorded daily. Seven days after hospital discharge, patients were interviewed using uniform questionnaires to measure opioid prescription use and pain rating.

Results

One hundred seventeen patients (age 73.0 (IQR 67.0, 77.0), 64 % male), were evaluated preoperatively and 90 completed one-week post discharge follow-up. Preoperatively, patients with frailty were more likely than patients without frailty to use opioids (46.2% vs. 20.9%, p=0.01). Doses of opioids prescribed at hospital discharge and the prescribed morphine milligram equivalents (MME) at discharge did not differ between groups. Seven days after discharge, the cumulative MME used were similar between cohorts. However, patients with frailty used a larger fraction of opioids prescribed to them (96.7 % (31.3, 100.0) vs. 25.0 % (0.0, 83.3), p = 0.007) and were more likely (OR 3.7, 95 % CI 1.13–12.13) to use 50 % and greater of opioids prescribed to them. Patients with frailty had higher pain scores before surgery and seven days after discharge compared to patients without frailty.

Conclusions

Patterns of postoperative opioid use after discharge were different between patients with and without frailty. Patients with frailty tended to use almost all the opioids prescribed while patients without frailty tended to use almost none of the opioids prescribed.

Disponible en: https://doi.org/10.1186/s12877-021-02101-4

Association between components of the delirium syndrome and outcomesin hospitalised adults: a systematic review and meta-analysis

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Background

Delirium is a heterogeneous syndrome with inattention as the core feature. There is considerable variation in the presence and degree of other symptom domains such as altered arousal, psychotic features and global cognitive dysfunction. Delirium is independently associated with increased mortality, but it is unclear whether individual symptom domains of delirium have prognostic importance. We conducted a systematic review and meta-analysis of studies in hospitalised adults in general settings to identify the relationship between symptom domains of delirium and outcomes.

Methods

We searched MEDLINE, EMBASE, PsycINFO, CINAHL, clinicaltrials.gov and the Cochrane Central Register of Controlled Trials from inception to November 2019. We included studies of hospitalised adults that reported associations between symptom domains of delirium and 30-day mortality (primary outcome), and other outcomes including mortality at other time points, lengthof stay, and dementia. Reviewer pairs independently screened articles, extracted data, and assessed risk of bias (Risk of Bias Assessment tool for Non-randomized Studies) and quality of evidence using the Grading of Recommendations, Assessment, Development and Evaluation framework. We performed random-effects meta-analyses stratified by delirium domain where possible.

Results

From 7092 citations we included 6 studies (6002 patients, 1112 with delirium). Higher mortality (ranging from in-hospital to follow-up beyond 12 months) was associated with altered arousal (pooled Odds Ratio (OR) 2.80, 95% Confidence Interval (CI) 2.33–3.37; moderate-quality evidence), inattention (pooled OR 2.57, 95% CI 1.74–3.80; low-quality evidence), and in single studies with disorientation, memory deficits and disorganised thoughts. Risk of bias varied acrossstudies but was moderate-to-high overall, mainly due to selection bias, lack of blinding of assessments and unclear risk of selective outcome reporting. We found no studies on the association between psychotic features, visuospatial deficits or affective disturbances in delirium and outcomes, or studies reporting non-mortality outcomes.

Conclusions

Few studies have related symptom domains of delirium to outcomes, but the available evidence suggests that altered arousal and inattention in delirium are associated with higher mortality than normal arousal and attention in people with or without delirium. Measurable symptom domains of delirium may have value in predicting survival and stratifying patients for treatment. We recommend that future delirium studies report outcomes by symptom domain.

Disponible en: https://doi.org/10.1186/s12877-021-02095-z

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Drugs and Aging

Treatment of Metastatic Gastrointestinal Stromal Tumors (GIST): A Focuson Older Patients

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Abstract

Gastrointestinal stromal tumors (GIST) originating in the Cajal cells are the most common mesenchymal neoplasms of the gastrointestinal tract. The median age of patients with this diagnosis is 65 years, and over 20% of cases affect people over the age of 70 years. The effectiveness and tolerability of systemic treatment with tyrosine kinase inhibitors in older patients with GIST seem to be similar to that in younger patients, but some studies have shown that treatment of older patients is suboptimal. Disability, frailty, comorbidities, and concomitant medications may influence treatment decisions, and toxicities also more often lead to treatment discontinuation. The known safety profile and oral administration route of the tyrosine kinase inhibitors used in GIST may allow maximization of treatment and the best efficacy, especially in older patients. This review summarizes the efficacy data for the systemic treatment of GIST, including data for older patients and from real-world experiences, if available and significant. The reported safety data and general rules for toxicity management, including appropriate patient selection and the need for careful monitoring during treatment, are also discussed.

Disponible en: https://doi.org/10.1007/s40266-021-00841-x

Prevalence and Factors Associated with Cumulative Anticholinergic Burden Among Older Long-Stay Nursing Home Residents with Overactive Bladder

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Background

Overactive bladder (OAB), the primary cause of urinary incontinence in nursing homes, is commonly treated with anticholinergic medications; however, the elderly population is vulnerableto the adverse effects associated with anticholinergic burden. Given the relatively high prevalence of OAB among nursing home residents, it is important to understand the magnitude of anticholinergic burden in this population.

Objectives

The objectives of this study were to (1) examine the prevalence of cumulative anticholinergic burden among long-stay nursing home (LSNH) residents with OAB; and (2) identify the factors associated with varying levels of cumulative anticholinergic burden.

Methods

This was a retrospective, cohort study using Minimum Data Set-linked Medicare claims data. Anticholinergic burden was determined based on the Anticholinergic Cognitive Burden scale and patient-specific dosing using defined daily dose. The Andersen Behavioral Model framework was used to identify the predisposing, enabling, and need factors associated with levels of anticholinergic burden. Multivariable logistic regression models were developed to determine the factors associated with levels of anticholinergic burden.

Results

A total of 123,308 LSNH residents with OAB were identified; 87.2% had some degree of anticholinergic burden and 27.3% had high cumulative burden. Multiple factors were associated with higher levels of burden, including younger age, female sex, and non-Hispanic White ethnicity (predisposing factors); dual eligibility, Southern geographic region, and rural residence (enabling factors); and a number of comorbidities and concomitant medications (need factors).

Conclusions

This study revealed a high level of anticholinergic burden among LSNH residents. Multiple factors were associated with a high level of burden. There is a need to optimize the use of anticholinergics due to their significant safety concerns in the LSNH setting.

Disponible en: https://doi.org/10.1007/s40266-021-00833-x

Geriatrics and Gerontology International

Potential prescribing omissions of anti-osteoporosis drugs is associated with rehabilitation outcomes after fragility fracture: Retrospective cohortstudy

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Abstract

Aim

We investigated the association between rehabilitation outcomes and polypharmacy, potentially inappropriate medications and potential prescribing omissions in older adults with fragilityfractures.

Methods

In total, we registered 217 older adults with fragility fractures (hip or vertebral) retrospectively and examined the association between rehabilitation outcome and polypharmacy, potentially inappropriate medications and potential prescribing omissions. Polypharmacy was defined as five or more drugs. Potentially inappropriate medications and potential prescribing omissions were defined by the Beers criteria (2015) and the screening tool to alert to treatment criteria version 2, respectively. The outcome was functional independence measure gain (functional independence measure at discharge – functional independence measure at admission).

Results

Multiple regression analyses revealed no association between functional independence measure gain and polypharmacy (crude: β = 0.058, P = 0.858; adjusted model: β = 0.013, P = 0.869) or potentially inappropriate medications (crude: β = 0.100, P = 0.144; adjusted model: β = 0.084, P = 0.260). However, there was a significant association between functional independence measure gain and potential prescribing omissions (crude: β = 0.167, P = 0.014; adjusted model: β = 0.180, P = 0.016). Participants without potential prescribing omissions (in other words, participants who were prescribed anti-osteoporosis drugs) had a greater functional independence measure gain than participants with potential prescribing omissions (in other words, those that were not prescribed anti-osteoporosis drugs).

Conclusion

To the best of our knowledge, this study is the first to report that participants without potential prescribing omissions had significantly improved rehabilitation outcomes.

Disponible en: **https://doi.org/10.1111/ggi.14145**

Journal of Geriatric Oncology

Bortezomib in first-line therapy is associated with falls in older adults with multiple myeloma

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Abstract Background

Bortezomib is a common multiple myeloma therapy that can cause treatment-related peripheral neuropathy, a risk factor for falls. The relationship between bortezomib and falls in older patients with multiple myeloma is unknown.

Methods

We analyzed the SEER-Medicare database for patients aged 65 or older diagnosed with multiple myeloma between 2007 and 2013. Claims were analyzed for myeloma treatments, falls, and covariates of interest. We evaluated accidental falls occurring within 12 months after starting first-line multiple myeloma treatment with bortezomib.

Results

Bortezomib was used in first-line therapy for 2052 older adults with new diagnoses of multiple myeloma. Claims for falls were reported in 157 (8%) patients within 12 months after starting bortezomib, compared to 102 (5%) patients not receiving bortezomib ($p < 0.001$). Bortezomib was associated with a 36% increased risk of falls after controlling for covariates (aHR 1.36; 95% CI 1.05–1.75; $p = 0.018$). In a landmark analysis of those who survived 12 months after starting treatment, the median overall survival of those with a fall was 35.7 months compared to
49.1 months for those without ($p < 0.0001$). A fall in the first year after diagnosis was associatedwith a 26% increased risk in hazard for death (aHR 1.26; 95% CI 1.02–1.56; $p = 0.033$).

Conclusion

In older adults with multiple myeloma, bortezomib was associated with an increased risk of having a diagnostic code for falls. Decreased overall survival was seen in those who fell within theyear of starting therapy. Prospective trials involving fall assessments and fall-prevention interventions are needed in this population.

Disponible en: https://doi.org/10.1016/j.jgo.2021.02.009

Efficacy of immune-checkpoint inhibitors (ICI) in the treatment of older adults with metastatic renal cell carcinoma (mRCC) – an International mRCC Database Consortium (IMDC) analysis

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Abstract

Objective

Older adults with metastatic renal cell carcinoma(mRCC) are underrepresented in immune-checkpoint inhibitor(ICI) registration trials. Here we compare the efficacy of ICI treatments in older vs. younger adults with mRCC.

Methods

Using the International mRCC Database Consortium(IMDC), patients treated with a PD(L)-1 basedICI were identified. Older adult was defined as ≥70-years at the time of treatment. Descriptive statistics were summarized in means, medians, and proportions. Effectiveness endpoints included overall survival (OS), time-to-treatment failure(TTF), time-to-next treatment(TNT), and overall response rate(ORR). Hazards ratios were adjusted(aHR) for IMDC risk factors, histology, line of treatment and older age.

Results

Of 1427 included patients, 397(28%) were older adults. ICI was used as 1st line(1 L) in 40%, 2nd line(2 L) in 49% and 3rd line(3 L) in 11% of patients. In univariable analysis, older adults had inferior OS compared to younger adults(25.1 m vs. 30.8 m, $p < 0.01$). There were no significant differences in TTF (6.9 m vs. 6.9 m, $p = 0.4$) or TNT(9.1 m vs 10 m, $p = 0.3$) between groups. In multivariable analyses, older age was not independently associated with worse OS(aHR = 1.02, $p = 0.8$), TTF(aHR = 0.95, $p = 0.6$) or TNT(aHR = 0.93, $p = 0.5$). Older adults had a lower ORR compared to younger adults(24% vs. 31%, $p = 0.01$), which was mainly driven by responses in 1 L(31% vs. 44%, $p = 0.02$) and not observed in 2 L/3 L.

Conclusions

After multivariable analyses, older adults with mRCC treated with ICI had no difference in OS, TTFor TNT when compared to younger adults. Our data support that chronological older age should not preclude patients from receiving ICI based therapies.

Disponible en: https://doi.org/10.1016/j.jgo.2021.02.022

Potentially inappropriate medication (PIM) use and severe drug interactions (SDIs) in older adults with cáncer

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Abstract

Background

Older adults with cancer frequently have other co-morbidities requiring prescription pharmacotherapy. The objectives of this study were to identify the prevalence of potentially inappropriate medications (PIMs), severe drug interactions (SDIs) and associated risk factors inthese patients.

Materials and Methods

This twelve-month prospective observation study was conducted at an Irish Hospital. PIMs were identified in older adults (≥65 years) using STOPP and OncPal criteria; potential SDIs using Stockley's interaction checker.

Results

We enrolled 186 patients; mean age 72.5(SD5.7) years, 46.2% female, mean co-morbidities 7.5(SD3.4), median medications 7(IQR4–9). Polypharmacy (≥6 medications) and major polypharmacy (≥11 medications) were identified in 60.8% and 17.7% respectively.

STOPP PIMs were observed in 73.1%; median 2(IQR1–3). The most common PIM identified was any drug prescribed beyond the recommended duration (46.5%). For each additional prescription, the odds of receiving a STOPP PIM increased by 79.2% (OR 1.792, 95% CI 1.459–2.02). Potential SDIs were identified in 50.5% participants. The most common were beta-blocker/alpha-blocker (6.5%), selective-serotonin re-uptake inhibitor (SSRI)/proton pump inhibitor (PPI) (5.9%) and SSRI/Aspirin (4.8%). For each additional prescription, the odds of an SDI increased by 50.8% (OR 1.508, 95% CI 1.288–1.764).

Seventy-seven (41.4%) participants died within six months of enrolment. OncPal PIMs were observed in 81.8% of this cohort, median 2(IQR1–3). The most common OncPal PIM was statin therapy (38%). For each additional prescription, the odds of receiving an OncPal PIM increased by 38.2%, (OR 1.382, 95% CI 1.080–1.767).

Conclusions

PIMs and SDIs are common in this population. Comprehensive specialist evaluation of medications by a geriatrician may identify PIMs thereby reducing related adverse outcomes suchas SDIs.

Disponible en: https://doi.org/10.1016/j.jgo.2021.02.021

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REVISTAS FARMACÉUTICAS

Atención farmacéutica = European Journal of Clinical Pharmacy

Anticholinergic load and delirium in end-of-life patients

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Abstract Background

Delirium is a neuropsychiatric syndrome associated with negative outcomes, including worseningof cognitive and functional status and an increased burden on patients and caregivers.
Medications with anticholinergic effect have been associated with delirium symptoms, but the relationship is still debated.

Objective

To assess the relation between delirium and anticholinergic load according to the hypothesis that the cumulative anticholinergic burden increases the risk of delirium.

Methods

This retrospective cross-sectional study was conducted in a sample of end-of-life patients in a hospice or living at home between February and August 2019. Delirium was diagnosed on admission using the 4 'A's Test (4AT) and each patient's anticholinergic burden was measuredwith the Anticholinergic Cognitive Burden (ACB) scale.

Results

Of the 461 eligible for analysis, 124 (26.9%) had delirium. Anticholinergic medications were associated with an increased risk of delirium in univariate (OR (95% CI) 1.26 (1.16–1.38), $p < 0.0001$) and multivariate models adjusted for age, sex, dementia, tumors, Karnofsky Performance Status (KPS) score, days of palliative assistance, and setting (OR (95% CI) 1.16 (1.05–1.28), $p < 0.0001$). Patients with delirium had a greater anticholinergic burden than those without, with a dose-effect relationship between total ACB score and delirium. Patients who scored 4 or more had 2 or 3 times the risk of delirium than those not taking anticholinergic drugs. The dose- response relationship was maintained in the multivariate model.

Conclusions

Anticholinergic drugs may influence the development of delirium due to the cumulative effect of multiple medications with modest antimuscarinic activity.

Disponible en: https://doi.org/10.1007/s00228-021-03125-w

Pharmacoepidemiology and Drug Safety

Identifying prescribing cascades in Alzheimer's disease and related dementias: The calcium channel blocker-diuretic prescribing cascade

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Abstract

Purpose

Prescribing cascades occur when a physician prescribes a new drug to address the side-effect of another drug. Persons with Alzheimer's disease and related dementias (ADRD) are at increased risk for prescribing cascades. Our objective was to develop an approach to estimating the proportion of calcium channel blocker-diuretic (CCB-diuretic) prescribing cascades among persons with ADRD in two U.S. health plans.

Methods

We identified patients aged ≥50 on January 1, 2017, dispensed a drug to treat ADRD in the 365-days prior to/on cohort entry date. Patients had medical/pharmacy coverage for 1 year before and through cohort entry. We excluded individuals with an institutional stay encounter inthe 45 days prior to cohort entry and censored patients based on: disenrollment from coverage, death, or end of data. We identified incident and prevalent CCB use in the 183-days following cohort entry, and identified subsequent incident diuretic use among incident and prevalent CCB-users within 365-days from cohort entry.

Results

There were 121 538 eligible patients. Approximately 62% were female, with a mean age of 79.5 (SD ±8.6). Overall 2.1% of the cohort experienced a prevalent CCB-diuretic prescribing cascade with 1586 incident diuretic-users among 36 462 prevalent CCB-users (4.3%, 95% CI 4.1–4.6%]); and there were161 incident diuretic-users among 3304 incident CCB-users (4.9%, 95% CI 4.2–5.7%) (incident CCB-diuretic cascade).

Conclusions

We describe an approach to identify prescribing cascades in persons with ADRD, which can beused to assess the proportion of prescribing cascades in large cohorts. We determined the proportion of CCB-diuretic prescribing cascades was low.

Disponible en: https://doi.org/10.1002/pds.5230

Use of preventive drugs during the last year of life in older adults with cancer or chronic progressive diseases

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ABSTRACT

Purpose

To evaluate the prescription of preventive medications with questionable usefulness in community dwelling elderly adults with cancer or chronic progressive diseases during the last yearof life.

Methods

Through the utilization of the healthcare utilization databases of the Lombardy region, Italy, we identified two retrospective cohorts of patients aged 65 years or more, who died in 2018 and hada diagnosis of either a solid cancer (N=19,367) or a chronic progressive disease (N=27,819). We estimated prescription of eight major classes of preventive drugs one year and one month before death; continuation or initiation of preventive drug use during the last month of life was also investigated.

Results

Over the last year of life, in both oncologic and non oncologic patients we observed a modest decrease in the prescription of blood glucose-lowering drugs, anti-hypertensives, lipid-modifying agents, and bisphosphonates, and a slight increase in the prescription of vitamins, minerals, antianemic drugs, and antithrombotic agents (among oncologic patients only). One month before death, the prescription of preventive drugs was still common, particularly for anti-hypertensives, antithrombotics, and antianemics, with more than 60% of patients continuing to be prescribed most preventive drugs and an over 10% starting a therapy with an antithrombotic, an antianemic,or a vitamin or mineral supplement.

Conclusion

These findings support the need for an appropriate drug review and improvement in the qualityof drug prescription for vulnerable populations at the end-of-life.

Disponible en: **https://doi.org/10.1002/pds.5223**

REVISTAS MEDICINA GENERAL

BMJ: British Medical Journal

Age dependent associations of risk factors with heart failure: pooled population based cohort study

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Abstract Objective

To assess age differences in risk factors for incident heart failure in the general population.

Design

Pooled population based cohort study.

Setting

Framingham Heart Study, Prevention of Renal and Vascular End-stage Disease Study, and Multi-Ethnic Study of Atherosclerosis.

Participants

24 675 participants without a history of heart failure stratified by age into young (<55 years; n=11 599), middle aged (55-64 years; n=5587), old (65-74 years; n=5190), and elderly (≥75 years; n=2299) individuals.

Main outcome measure

Incident heart failure.

Results

Over a median follow-up of 12.7 years, 138/11 599 (1%), 293/5587 (5%), 538/5190 (10%), and 412/2299 (18%) of young, middle aged, old, and elderly participants, respectively, developed heart failure. In young participants, 32% (n=44) of heart failure cases were classified as heart failure with preserved ejection fraction compared with 43% (n=179) in elderly participants. Risk factors including hypertension, diabetes, current smoking history, and previous myocardial infarction conferred greater relative risk in younger compared with older participants (P for interaction <0.05 for all). For example, hypertension was associated with a threefold increase in risk of future heart failure in young participants (hazard ratio 3.02, 95% confidence interval 2.10 to 4.34; P<0.001) compared with a 1.4-fold risk in elderly participants (1.43, 1.13 to 1.81; P=0.003). The absolute risk for developing heart failure was lower in younger than in older participants with and without risk factors. Importantly, known risk factors explained a greater proportion of overall population attributable risk for heart failure in young participants
(75% *v* 53% in elderly participants), with better model performance (C index 0.79 *v* 0.64). Similarly, the population attributable risks of obesity (21% *v* 13%), hypertension (35% *v* 23%), diabetes (14% *v* 7%), and current smoking (32% *v* 1%) were higher in young compared with elderlyparticipants.

Conclusions

Despite a lower incidence and absolute risk of heart failure among younger compared with older people, the stronger association and greater attributable risk of modifiable risk factors among young participants highlight the importance of preventive efforts across the adult life course.

Disponible: https://doi.org/10.1136/bmj.n461