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REVISIÓN BIBLIOGRÁFICA ENERO 2022: Selección de artículos

REVISTAS GERIÁTRICAS

Age and Ageing

Do we AGREE on the targets of antihypertensive drug treatment in older adults: a systematic review of guidelines on primary prevention of cardiovascular diseases.

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Abstract

Background

translation of the available evidence concerning primary cardiovascular prevention into clinical guidance for the heterogeneous population of older adults is challenging. With this review, we aimed to give an overview of the thresholds and targets of antihypertensive drug therapy for older adults in currently used guidelines on primary cardiovascular prevention. Secondly, we evaluated the relationship between the advised targets and guideline characteristics, including guideline quality.

Methods

we systematically searched PubMed, Embase, Emcare and five guideline databases. We selected guidelines with (i) numerical thresholds for the initiation or target values of antihypertensive drug therapy in context of primary prevention (January 2008–July 2020) and (ii) specific advice concerning antihypertensive drug therapy in older adults. We extracted the recommendations and appraised the quality of included guidelines with the AGREE II instrument.

Results

thirty-four guidelines provided recommendations concerning antihypertensive drug therapy in older adults. Twenty advised a higher target of systolic blood pressure (SBP) for octogenarians in comparison with the general population and three advised a lower target. Over half of the guidelines (n = 18) recommended to target a SBP <150 mmHg in the oldest

old, while four endorsed targets of SBP lower than 130 or 120 mmHg. Although many guidelines acknowledged frailty, only three gave specific thresholds and targets. Guideline characteristics, including methodological quality, were not related with the recommended targets.

Conclusion

the ongoing debate concerning targets of antihypertensive treatment in older adults, is reflected in an inconsistency of recommendations across guidelines. Recommended targets are largely set on chronological rather than biological age.

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Potentially inappropriate medications and their effect on falls during hospital admission

PUBLICAR

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Abstract

Aims

evidence on the difference in fracture risks for patients with atrial fibrillation (AF) receiving direct oral anticoagulants (DOACs) versus warfarin remains controversial. We aim to compare the fracture risks between the DOAC and warfarin prescriptions among the AF patients.

Methods and Results

we systematically searched PubMed, EMBASE, the Cochrane Library and Web of Science up to 19 April 2021 for relevant studies. And the observational studies regarding the relationship between the DAOC versus warfarin prescriptions and fracture risks among the patients with AF were included in this meta-analysis. Two investigators independently screened the articles and extracted the relevant data. A random- or fixed-effect model was applied to calculate the pooled hazard ratio/relative ratios with 95% confidence intervals of fracture risks associated with the DOAC and warfarin prescriptions. Six studies comprising 351,208 patients and 9,424 fractures were included in this meta-analysis. Overall, the AF patients treated with DOACs tend to present a lower risk of any fracture

compared with those treated with warfarin (relative ratio: 0.82, 95% confidence interval (CI): 0.74–0.91). Sub-analyses for each individual DOAC indicate that apixaban and rivaroxan are associated with lower risk of any fracture compared with warfarin (HR: 0.75, 95% CI: 0.60–0.92, and HR: 0.79, 95% CI: 0.71–0.88, respectively).

Conclusion

this meta-analysis suggests that DOAC users have a lower risk of fractures than the warfarin users. The results of this study may provide optimal anticoagulation opportunities for AF patients with high fracture risk factors.

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Drugs and Aging

Frequency and Acceptance of Clinical Decision Support System-Generated STOPP/START Signals for Hospitalised Older Patients with Polypharmacy and Multimorbidity

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Abstract

Background

The Screening Tool of Older Persons' Prescriptions (STOPP)/Screening Tool to Alert to Right Treatment (START) instrument is used to evaluate the appropriateness of medication in older people. STOPP/START criteria have been converted into software algorithms and implemented in a clinical decision support system (CDSS) to facilitate their use in clinical practice.

Objective

Our objective was to determine the frequency of CDSS-generated STOPP/START signals and their subsequent acceptance by a pharmacotherapy team in a hospital setting.

Design and Methods

Hospitalised older patients with polypharmacy and multimorbidity allocated to the intervention arm of the OPERAM (OPtimising thERapy to prevent Avoidable hospital admissions in the Multimorbid elderly) trial underwent a CDSS-assisted structured medication review in four European hospitals. We evaluated the frequency of CDSS-generated STOPP/START signals and the subsequent acceptance of these signals by a trained pharmacotherapy team consisting of a physician and pharmacist after evaluation of clinical applicability to the individual patient, prior to discussing pharmacotherapy optimisation recommendations with the patient and attending physicians. Multivariate linear regression analysis was used to investigate potential patient-related (e.g. age, number of co-morbidities and medications) and setting-related (e.g. ward type, country of inclusion) determinants for acceptance of STOPP and START signals.

Results

In 819/826 (99%) of the patients, at least one STOPP/START signal was generated using a set of 110 algorithms based on STOPP/START v2 criteria. Overall, 39% of the 5080 signals were accepted by the pharmacotherapy team. There was a high variability in the frequency and the subsequent acceptance of the individual STOPP/START criteria. The acceptance ranged from 2.5 to 75.8% for the top ten most frequently generated STOPP and START signals. The signal to stop a drug without a clinical indication was most frequently generated (28%), with more than half of the signals accepted (54%). No difference in mean acceptance of STOPP versus START signals was found. In multivariate analysis, most patient-related determinants did not predict acceptance, although the acceptance of START signals increased in patients with one or more hospital admissions (+ 7.9; 95% confidence interval [CI] 1.6–14.1) or one or more falls in the previous year (+ 7.1; 95% CI 0.7–13.4). A higher number of co-morbidities was associated with lower acceptance of STOPP (− 11.8%; 95% CI − 19.2 to − 4.5) and START (− 11.0%; 95% CI − 19.4 to − 2.6) signals for patients with more than nine and between seven and nine co-morbidities, respectively. For setting-related determinants, the acceptance differed significantly between the participating trial sites. Compared with Switzerland, the acceptance was higher in Ireland (STOPP: + 26.8%; 95% CI 16.8–36.7; START: + 31.1%; 95% CI 18.2–44.0) and in the Netherlands (STOPP: + 14.7%; 95% CI 7.8–21.7). Admission to a surgical ward was positively associated with acceptance of STOPP signals (+ 10.3%; 95% CI 3.8–16.8).

Conclusion

The involvement of an expert team in translating population-based CDSS signals to individual patients is essential, as more than half of the signals for potential overuse, underuse, and misuse were not deemed clinically appropriate in a hospital setting. Patient-related potential determinants were poor predictors of acceptance. Future research investigating factors that affect patients' and physicians' agreement with medication changes recommended by expert teams may provide further insight for implementation in clinical practice.

Disponible en: https://link.springer.com/article/10.1007/s40266-021-00904-z

Journal of Geriatric Oncology

Use of potentially inappropriate medication in older patients with lung cancer at the end of life

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Abstract

Objectives

Medications at the end of life should be used for symptom control. Medications which potential adverse effects outweigh their expected benefits are called 'potentially inappropriate medications' (PIMs). PIMs are related with adverse drug events and reduced quality of life. In this study, we investigated to what extent PIMs are dispensed to older patients with lung cancer in the last month of life.

Methods

We selected patients with lung cancer, aged 65+, diagnosed between 2009 and 2014, and who died before April 1st 2015 from the population-based Netherlands Cancer Registry

(NCR). The NCR is linked to the PHARMO Database Network, that includes medications dispensed by community pharmacies in the Netherlands. The eight PIM groups were based on the OncPal Deprescribing Guideline: aspirin, dyslipidaemia medications, antihypertensives, osteoporosis medications, peptic ulcer prophylaxis, oral hypoglycaemics, vitamins and minerals.

Results

Data of 7864 patients with lung cancer were analyzed. Median age was 74 year (IQR = 70–79) and 67% was male. 45% of all patients received at least one PIM in their last month of life. Taking into account all dispensed medications, patients receiving PIMs received more different medications compared to those receiving no PIMs, respectively 10 (SD = 5) vs. 3 (SD = 4) different medications ($P < 0.001$).

Conclusion

Almost half of the older patients with lung cancer in the Netherlands received PIMs in their last month of life. Since PIM use is associated with reduced quality of life, it is important that health care professionals continue to critically assess which medication can be discontinued at the end of life.

Disponible en: https://www.geriatriconcology.net/article/S1879-4068(21)00171-5/fulltext

REVISTAS FARMACÉUTICAS

European Journal of Hospital Pharmacy

Medication reconciliation—is it possible to speed up without compromising quality? A before–after study in the emergency department

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Abstract

Objective The aim of this study was to investigate whether it was possible to decrease the time used for medication reconciliation (MR) in the emergency department without compromising quality. A more efficient method will enable more patients to receive MR as early as possible after admission to hospital.

Methods Potential key factors for improvement of the standard method of MR by clinical pharmacists were identified through an observational period. A revised method was developed, focusing on decreasing time spent on the patient interview by use of a condensed checklist and probing questions based on information from a prescription database. Non-inferior quality (proportion of patients with at least one identified medication discrepancy and number of identified medication discrepancies per patient) of the revised method was evaluated using a before–after study design with 200 individuals in each group. Non-inferiority limit was set at 10%. The Mann-Whitney U test was used for statistical evaluation of the difference in time use per patient in the MR process between the before and after group.

Results Mean age of the included patients was 78 years in both groups. The time used for MR in the after group was 34% shorter (37 min vs 56 min, $p<0.0001$) compared with the before group. The revised method was shown to be non-inferior compared with the original method with respect to the proportion of patients with at least one identified discrepancy (81%, 95% CI 76% to 86% vs 79%, 95% CI 73% to 84%). Also, non-inferiority was shown for the number of identified discrepancies per patient, where the average number of discrepancies per patient was 1.9 (95% CI 1.7 to 2.1) in both groups.

Conclusion This study showed that it was possible to speed up the MR process without compromising its effectiveness in identifying medication discrepancies.

Disponible en: https://ejhp.bmj.com/content/early/2022/01/26/ejhpharm-2021-003071

Farmacia Hospitalaria

Rivaroxabán e inhibidores selectivos de la recaptación de serotonina: Análisis comparativo del riesgo de sangrado

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Resumen

Objetivo: La combinación de rivaroxabán e inhibidores selectivos de la recaptación de serotonina presenta un riesgo de interacción farmacodinámica y farmacocinética que depende del tipo de inhibidor selectivo de la recaptación de serotonina empleado, ya que algunos son inhibidores del citocromo p450, mientras que otros no lo son. El objetivo del presente estudio fue evaluar con datos de vida real si el tipo de inhibidor selectivo de la recaptación de serotonina utilizado influye en la frecuencia y en la gravedad de sangrado en pacientes anticoagulados con rivaroxabán.
Método: Estudio observacional, longitudinal, retrospectivo y unicéntrico, realizado entre enero de 2016 y febrero de 2020 en pacientes ≥ 18 años que recibían rivaroxabán, en indicaciones autorizadas y financiadas, y que estaban siendo tratados concomitantemente con inhibidores selectivos de la recaptación de serotonina. Se establecieron dos cohortes en función del inhibidor selectivo de la recaptación de serotonina coadministrado: inhibidores del CYP3A4 (grupo 1) —sertralina, fluoxetina y paroxetina—, y no inhibidores del CYP3A4 (grupo 2) —citalopram y escitalopram—. Se analizaron los eventos hemorrágicos, la gravedad del sangrado, la dosis diaria de rivaroxabán y la medicación concomitante que pudiese influir en el riesgo de sangrado.
Resultados: Se incluyeron 146 pacientes (89 en el grupo 1 y 57 en el grupo 2) y se identificaron un total de 35 eventos hemorrágicos (24% de los pacientes), de los que 12 fueron eventos mayores y 23 menores. La frecuencia de sangrado fue ligeramente mayor en el grupo 1 que en el 2 (25,8% versus 21%), pero no se encontraron diferencias significativas entre ambos grupos, ni tampoco en la frecuencia de sangrados mayores (10,1% versus 5,3%; p = 0,235) o menores (13,5% versus 15,8%; p = 0,496). La frecuencia de eventos hemorrágicos con la dosis de 20 mg fue del 9% (8/89) en el grupo 1 y del 14% (8/57) en el grupo 2 (p = 0,2137), mientras que con una dosis de 15 mg la frecuencia de eventos fue del 16,9% (15/89) en el grupo 1 y del 7% (4/57) en el grupo 2 (p = 0,042).
Conclusiones: No se han hallado diferencias significativas en el riesgo de sangrado según el tipo de inhibidor selectivo de la recaptación de serotonina que se administre de forma concomitante al rivaroxabán. Sí se han observado diferencias significativas en función de la dosis de rivaroxabán utilizada.

Disponible en: http://revistafarmaciahospitalaria.sefh.es/gdcr/index.php/fh/article/view/11776

The Annals of Pharmacotherapy

Antiplatelet Use in Ischemic Stroke

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Abstract
Objective:
A literature review of antiplatelet agents for primary and secondary stroke prevention, including mechanism of action, cost, and reasons for lack of benefit.
Data sources:
Articles were gathered from MEDLINE, Cochrane Reviews, and PubMed databases (1980-2021). Abstracts from scientific meetings were considered. Search terms included ischemic stroke, aspirin, clopidogrel, dipyridamole, ticagrelor, cilostazol, prasugrel, glycoprotein IIb/IIIa inhibitors.
Study selection and data extraction:
English-language original and review articles were evaluated. Guidelines from multiple countries were reviewed. Articles were evaluated independently by 2 authors.
Data synthesis:
An abundance of evidence supports aspirin and clopidogrel use for secondary stroke prevention. In the acute phase (first 21 days postinitial stroke), these medications have higher efficacy for preventing further stroke when combined, but long-term combination therapy is associated with higher hemorrhage rates. Antiplatelet treatment failure is influenced by poor adherence and genetic polymorphisms. Antiplatelet agents such as cilostazol may provide extra benefit over clopidogrel and aspirin, in certain racial groups, but further research in more diverse ethnic populations is needed.
Relevance to patient care and clinical practice:
This review presents the data available on the use of different antiplatelet agents poststroke. Dual therapy, recurrence after initiation of secondary preventative therapy, and areas for future research are discussed.
Conclusions:
Although good evidence exists for the use of certain antiplatelet agents postischemic stroke, there are considerable opportunities for future research to investigate personalized therapies. These include screening patients for platelet polymorphisms that confer antiplatelet resistance and for randomized trials including more racially diverse populations.
Disponible en: https://journals.sagepub.com/doi/full/10.1177/10600280211073009

A Scoping Review Evaluating the Effect of SGLT-2 Inhibitors on Insulin Dose Requirements in Insulin-Dependent Patients With Type 2 Diabetes

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Abstract
Objective

Assess evidence describing the effect of Sodium-Glucose Cotransporter-2 (SGLT2) inhibitors on total daily insulin (TDI) requirements in insulin-dependent patients with type 2 diabetes.

Data sources

A scoping review was conducted following Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Protocols and Scoping Reviews (PRISMA-ScR) guidelines. The search was conducted in PubMed; citation mapping was completed in Web of Science. Filters for human studies, English language, and a publication date, from January 1, 2005 to April 12, 2021, were applied.

Study selection and data extraction

Studies assessing insulin dose requirements with concurrent use of an SGLT2 inhibitor for patients with type 2 diabetes were included.

Data synthesis

Sixteen studies were included and demonstrated that addition of an SGLT2 inhibitor typically reduced TDI requirements. Insulin reductions were often statistically significant, occurring in studies evaluating (1) within subjects who received SGLT2 inhibitors, and (2) between subjects receiving SGLT2 inhibitors versus placebo. Compared with placebo, insulin dose reduction ranged from −0.72 to −19.2 units. However, studies were relatively small, not designed to assess TDI change, and some utilized fixed dose insulin protocols or empiric insulin dose reductions.

Conclusions

Lowering insulin requirements may have benefits, such as decreased hypoglycemia risk, insulin resistance, and cost. Addition of an SGLT2 inhibitor may modestly reduce TDI requirements for patients with type 2 diabetes. Evidence indicating SGLT2 inhibitor use reduces TDI may lead to additional implementation in practice and inform future research. Further research is needed to clarify insulin type (i.e., basal or prandial) and degree of TDI reduction expected with addition of an SGLT2 inhibitor.

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REVISTAS MEDICINA GENERAL

Atención Primaria

A systematic review and meta-analysis of the effectiveness and adverse events of gabapentin and pregabalin for sciatica pain.

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Aim

This SR aims to assess the effectiveness of pregabalin and gabapentin on pain and disability caused by acute sciatica and the adverse events associated with their clinical use.

Design

Systematic review.

Databases

Electronic databases of Cochrane Central Register of Controlled Trials, MEDLINE, EMBASE, and Clinical Trials.gov were searched from their inception until March 1st of 2021.
Selection criteria
Randomized trials (RCT) with adults>18 years old with acute sciatica for a minimum of 1 week and a maximum of 1 year (at least moderate pain).
Data treatment
The outcomes were pain, disability and adverse events. Data was summarized using odds ratio and mean difference. GRADE was used to calculate the level of evidence.
Results
Eight RCT involving 747 participants were included. The effect of pregabalin was assessed in 3 RCT and in one three-arm trial (pregabalin vs limaprost vs a combination of limaprost and pregabalin). Two trials assessed the effect of gabapentin compared with placebo and one compared with tramadol. One study assessed the effect of gabapentin vs pregabalin in a crossover head-to-head trial.
A statistically significant improvement on leg pain at 2 weeks and leg pain with movement at 3 and 4 months was found in a RCT comparing gabapentin with placebo. There were no statistically differences on the remaining time periods assessed for leg pain, low back pain and functional disability.
Conclusions
This SR provides clear evidence for lack of effectiveness of pregabalin and gabapentin for sciatica pain management. In view of this, its routine clinical use cannot be supported

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