

3 months, as well as the absolute reduction of monthly acute medication days (AMD). Data were recorded from electronic medical records and patient interviews. The study was approved by the Ethics Committee. Informed consent was obtained.

Results We identified 110 patients who had received galcanezumab (n=57) and fremanezumab (n=53) as their first mAb. Of these, 24 (21,8%) switched to the CGRP-receptor mAb, erenumab. Of 105 patients treated with erenumab, 30 (28,6%) switched to a CGRP-ligand mAb. Three patients switched because of side effects, so 51 patients were included.

The $\geq 50\%$ responder rate was 40% and 61,9% at 3 months with erenumab and CGRP-ligand mAb, respectively. MHD reduction: $17 \pm 7,4$ to $13,8 \pm 8,7$ and $16 \pm 7,7$ to $8,4 \pm 6,1$, respectively. AMD reduction: $16,1 \pm 9,9$ to $15,4 \pm 10,2$ and $11,7 \pm 9,2$ to $7,6 \pm 7,3$. Seven patients (35%) changed to a third mAb in patients that switched from ligand mAb to receptor mAb, 23,8% in the other group.

Conclusion and Relevance Switching seems to be a promising treatment option especially in migraine patients that switched from CGRP-receptor mAb to CGRP-ligand mAb. However, some of them need to switch to a third mAb. More studies are needed to describe which patients will respond to CGRP-mAb switching.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest.

4CPS-019 DIFFERENCES IN MEROPENEM DOSE ADJUSTMENT WITH CALCULATION OF GLOMERULAR FILTRATION RATE THROUGH DIFFERENT FORMULAS

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Background and Importance Meropenem is a carbapenemic antibiotic that is mainly eliminated by renal route. Therefore, an alteration of the glomerular filtration rate (GFR) may affect the elimination of the drug. GFR can be calculated using several validated formulas using different parameters.

Aim and Objectives The aim of the study was to analyse the discrepancies between the results of the different GFR equations and the dosage adjustment.

Material and Methods A descriptive, retrospective and cross-sectional study that included patients treated with meropenem for 3 months was performed. The standard dose was 1g every 8 hours. Dose adjustments were made according to a data sheet (TFG $< 50\text{mL}/\text{min}$ and $< 25\text{mL}/\text{min}$).

Age, sex, weight, creatinine (mg/dl), urea (mg/dl), albumin (g/dl) and meropenem doses were recorded. With these data, the GFR was calculated: Chronic Kidney Disease Epidemiology Collaboration (CKD-EPI) ($\text{ml}/\text{min}/1.73\text{m}^2$); Modification of Diet in Renal Disease Study Equation (MDRD) ($\text{ml}/\text{min}/1.73\text{m}^2$); and Cockcroft-Gault (CG) (ml/min).

Results A total of 136 patients were included. The mean age was 76.84 ± 12.7 years. The calculation of mean GFR according to the different equations was as follows: 60.46 ± 49.0 $\text{ml}/\text{min}/1.73\text{m}^2$ (MDRD); 72.12 ± 49.6 ml/min (Cockcroft-Gault) and 86.17 ± 63.1 $\text{ml}/\text{min}/1.73\text{m}^2$ (CKD-EPI).

Dose adjustment was carried out In 19.12% (26) of the patients meropenem dose adjustment was performed with

GFR $< 50\text{ml}/\text{min}$ and in 12.5% (17) GFR $< 25\text{ml}/\text{min}$ was adjusted.

The dose adjustment of meropenem should have been with MDRD: 39.8% (54) of the patients had a GFR lower than $50\text{ml}/\text{min}$ and 23.53% (32) had a GFR lower than $25\text{ml}/\text{min}$. According to Cockcroft-Gault: 38.23% (52) of the patients had GFR $< 50\text{ml}/\text{min}$ and 16.17% (22) had GFR $< 25\text{ml}/\text{min}$. Finally, according to CKD-EPI, 36.03% (49) had GFR $< 51\text{ml}/\text{min}$ and 12.5% (17) had GFR $< 25\text{ml}/\text{min}$.

Finally, it was observed that 2.2% (3) of the patients had no dose adjustment for GFR $< 50\text{ml}/\text{min}$ when any of the equations indicated this; and that in 14.0% (19), dose adjustment by GFR $< 25\text{ml}/\text{min}$ was not performed when required it.

Conclusion and Relevance There are significant discrepancies in the calculation of GFR with different equations, which affects the dose adjustment of meropenem. Taking into account the values of several equations would improve both the efficacy and safety of meropenem treatment.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest.

4CPS-020 EVALUATION OF THE EFFECTIVENESS OF MONOCLONAL ANTIBODIES AGAINST MIGRAINE HEADACHE

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Background and Importance Erenumab and galcanezumab are monoclonal antibodies that act at the level of the calcitonin gene-related peptide, elevated in patients with migraine.

Aim and Objectives To establish the effectiveness of erenumab and galcanezumab in the treatment of migraine.

Material and Methods Observational, single-centre, retrospective study. All adult patients who initiated treatment between February 2020 to March 2023 were included.

Demographic data were collected (age and sex), drug discontinuation and its reason (primary, secondary failure or adverse effects [AE]) and duration of treatment.

According to our centre's protocol, these treatments are intended to be withdrawn after one year, as they are prophylactic treatments, not continuation treatments. Thus, the main endpoint to determine the drug's effectiveness was the response at 1 year of treatment and the evolution after withdrawal (resumption of treatment vs no treatment).

Statistical analysis was performed using Pearson's Chi-square test (SPSS v. 26.0).

Results We included 273 patients (59% erenumab, 41% galcanezumab), of whom 82% were women. Median age: 52 years [19 – 83].

With erenumab, 9% of patients achieved complete response at 1 year and were able to withdraw treatment. However, 21% of patients had a partial response, 11% were secondary failures and 10% continued without withdrawing the drug. 43% discontinued; after primary failure (37%) or AE (6%), mainly constipation.

With galcanezumab, 10% of the patients achieved a complete response at one year and were able to withdraw the

drug. Nevertheless, 22% of patients had a partial response, 3% were secondary failures and 19% were still unable to withdraw the drug. 34% discontinued; after primary failure (29%) or AE (5%), mainly constipation.

At the end of the study, 27% of patients treated with erenumab did not complete 1 year of treatment due to lack of time, and the same was true for 34% of patients with galcanezumab.

Patients who reached the primary endpoint were still without any treatment after a mean of 4 months.

Conclusion and Relevance Results obtained do not demonstrate a high effectiveness after one year of treatment with these drugs or differences between erenumab and galcanezumab, so more studies are necessary to continue evaluating effectiveness.

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4CPS-021 PERFORMANCE OF MULTIPLE TRIGGER TOOLS IN IDENTIFYING MEDICATION-RELATED HOSPITAL READMISSIONS

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Background and Importance The Dutch polypharmacy guideline recommends using a trigger tool to identify medication-related hospital (re)admissions. Many trigger tools exist for this purpose. Yet, the effectiveness of these trigger tools and clinical applicability remains uncertain.

Aim and Objectives The aim of this study is to evaluate the performance of trigger tools in identifying medication-related readmissions (MRRs).

Material and Methods In a single-centre cross-sectional study, data was analysed from a previous study assessing 1120 readmissions. In this prior study, a panel of physicians and pharmacists retrospectively assessed readmissions as medication-related (n=181), including preventability.

This current study employed four trigger tools (START-STOPP criteria, OPERAM, ADR-tool, and QUADRAT*) on clinically adjudicated MRRs. The START-STOPP criteria focus on under- and overtreatment, OPERAM on multiple causes, while ADR and QUADRAT tools focus on side effects. The tools include explicit triggers (medication + symptom, e.g., diuretics and dehydration) and implicit triggers (general triggers requiring extensive reviewer knowledge, e.g., avoiding overtreatment). The trigger tools were applied to clinically adjudicated MRRs in duplicate. The primary outcome was each tool's performance in identifying MRRs. Secondary outcomes included assessing the performances of these tools in identifying MRRs based on the potential preventability and age of patients (most tools are developed for patients ≥ 70 years). Descriptive data-analysis was used.

Results Of 181 MRRs, 159 (88%) were regarded potentially preventable by the panel. Among the 181 MRRs, the OPERAM trigger tool identified 92% of MRRs (62% explicit and 30% implicit triggers), while the QUADRAT, ADR and START-STOPP criteria respectively identified 76%, 51% and

7% of MRRs. The tools were more effective in identifying non-preventable MRRs. The tools missed triggers regarding transition in care errors, non-adherence or sick day rules. The trigger tools identified an equal proportion of MRRs for patients below and above 70 years.

Conclusion and Relevance Multiple trigger tools were applied to real-life patient data. START-STOPP criteria, ADR-tool, and QUADRAT were unsuccessful in identifying MRRs in this study. OPERAM performed the best but included many implicit triggers necessitating substantial reviewer knowledge to assess MRRs. Consequently, in daily clinical practice, OPERAM is not easy to apply as a quick screening tool but could be a good tool for research purposes.

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Conflict of Interest No conflict of interest.

4CPS-022 THE EFFECT OF DIGITAL CLINICAL DECISION SUPPORT ON PHARMACOTHERAPY IN HOSPITALISED (MORBIDLY) OBESE PATIENTS: A PROSPECTIVE INTERVENTION STUDY

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Background and Importance The pharmacokinetics and dynamics of medication can be altered in (morbidly) obese patients. Standard medication doses may be suboptimal in these patients and adjustments based on body mass index (BMI) or body weight (BW) may be needed. Digital clinical decision support (eCDS) may help optimise pharmacotherapy in these patients.

Aim and Objectives The aim of this study was to assess the effect of eCDS on adjustments in pharmacotherapy based on BMI or BW in hospitalised (morbidly) obese patients.

Material and Methods This prospective intervention study with retrospective baseline measurement included hospitalised patients ≥ 18 years with BMI ≥ 30 kg/m² and/or BW ≥ 90 kg from 1 January 2022 to 30 September 2022 (pre-eCDS group) and from 10 October 2022 to 25 November 2022 (post-eCDS group). In the intervention period, hospital pharmacy recommended pharmacotherapy adjustments to prescribers based on eCDS. eCDS is a tool, integrated in the hospital's electronic health record system, that detected patients whose medication order(s) needed to be adjusted to BMI or BW. Study outcomes were (i) prevalence of medication orders adjusted to BMI or BW pre-eCDS versus post-eCDS, (ii) prevalence of post-eCDS patients with ≥ 1 medication orders resulting in a recommendation for adjustment, including medication details, (iii) number and percentage of recommendations that actually led to an adjustment in pharmacotherapy, including reasons for rejecting a recommendation.

Results In the post-eCDS group pharmacotherapy was significantly more often adjusted to BMI or BW: 77.7% (912 of 1,173 medication orders) post-eCDS vs 58.2% (3,519 of 6,049 medication orders) pre-eCDS (p<0.0001). Post-eCDS 328 patients had ≥ 1 medication order(s) resulting in a recommendation for adjustment. The majority of recommendations and adjustments were for nadroparin, 93% (324/349) and 89% (163/186) respectively. 186 of 349 (53.3%)