CPC-112 PREDICTORS OF POTENTIALLY INAPPROPRIATE PRESCRIBING IN ELDERLY FALLERS

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Background A study to explore the rate of potentially inappropriate prescribing (PIP) in elderly fallers, and the impact of pharmacist-led medicines reviews was undertaken. Data relating to possible predictors of PIP, identified in the literature, were also collected.

Purpose To investigate the following factors as predictors of PIP in elderly fallers:

- Demographic data
- Drugs classes
- Polypharmacy

Materials and Methods The following data were collected as part of a larger study:

- Demographic data: age, gender and days since admission at time of fall
- Number of regular medicines
- Name and class of PIMs identified

Results

- Sixty patients were included in this study, 34 (56.7%) of whom were male.
- The median age was 79 years (range: 29). Patients were taking a median of 9 regular drugs (range: 17). Twenty-one (35%) patients were prescribed ≥1 PIM at the time of their fall.
- Gender was not a predictor of PIP, with 15 male and 8 female patients prescribed ≥1 PIM (p = 0.548).
- Excessive polypharmacy (≥10 medications) was identified as a positive predictor of PIP. Participants prescribed ≥1 PIM were taking a mean of 10.86 regular medicines; those not prescribed ≥1 PIM were taking a mean of 7.67 regular medicines (p < 0.001).
- A drug from each class in section H of the STOPP criteria was identified at least once. Benzodiazepines were the most frequently prescribed PIM drug class, accounting for 59% of PIMs overall. Six patients in the baseline group and 7 in the intervention study were prescribed a benzodiazepine. The most commonly prescribed PIM was temazepam.

Conclusions Polypharmacy is a predictor of PIP. Patients prescribed ≥1 PIM were taking on average 3 more regular medicines than those who were not prescribed ≥1 PIM (p < 0.001). Gender was not a predictor of PIP.

No conflict of interest.

CPC-113 PREOPERATIVE ORAL IRON PRESCRIPTION IN THE PREVENTION OF POSTOPERATIVE ACUTE ANAEMIA IN ORTHOPAEDIC SURGERY

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Background A previous study on postoperative acute anaemia in orthopaedic surgery was conducted in 2011 (S1), showing that anaemia is recurrent and not always treated. We have recommended prescribing oral iron in the month preceding surgery. A pre-dispensed oral iron prescription has been set up for use during preoperative anaesthesia consultations. We decided to evaluate the impact of this recommendation by a second study in 2012 (S2).

Purpose To assess the impact of preoperative oral iron prescription on the prevalence and treatment of postoperative acute anaemia in orthopaedic surgery.

Materials and Methods Both studies included patients who underwent total hip or knee arthroplasty (THA/TKA). S1 was conducted retrospectively on all patients operated on in 2011. S2 was conducted prospectively on patients who had been prescribed preoperative iron in September/October 2012. We collected data about operations, iron prescriptions, haemoglobin levels, transfusions and lengths of stay.

Results Operations: 327 (S1); 206THA/122TKA vs. 30 (S2); 13THA/17TKA. Postoperative iron prescription: 69% of patients (S1): oral iron 32%, intravenous iron 20%, both oral and intravenous iron 17% vs. 43% of patients (S2): oral iron 25%, intravenous iron 13%, both oral and intravenous iron 7%. Haemoglobin levels: between preoperative and immediate postoperative periods, mean decrease was from 12.9 ± 0.2 g/dl to 11.1 ± 0.1 g/dl (S1) vs. 13.3 ± 0.2 g/dl to 11.7 ± 0.2 g/dl (S2), between preoperative period and hospital discharge, mean loss was 2.2 ± 0.2 g/dl (S1) vs. 1.9 ± 0.17 g/dl (S2) (p < 10–3). Transfusions: 29% of patients (S1) vs. 20% (S2) (p < 10–3). Length of stay: mean was 10.6 ± 0.8 days (S1) vs. 8.3 ± 0.3 days (S2) (p < 0.005).

Conclusions The prospective study showed that oral iron preventive treatment significantly decreases haemoglobin level fall, transfusion rate and length of stay. Therefore it is necessary to sensitize prescribers concerning preventive iron coverage. A further study is needed to evaluate the impact of a longer iron preventive treatment on a larger number of patients.

No conflict of interest.