

Systematic Deprescribing of Proton Pump Inhibitors: Pilot Study in a Geriatric-Medicine Unit at a Community Teaching Hospital

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Background:

Proton pump inhibitors (PPIs) are inappropriately prescribed in up to 50% of users. Long-term use of PPIs may be linked to increased risk of *Clostridioides difficile* and enteric infections.

Objective:

To examine feasibility and impact of a PPI-deprescribing algorithm on select group of patients in a geriatric-medicine unit at a community teaching hospital.

Methods:

This pilot project was a single center intervention with pre- and post-study design conducted on medically stable patients in a geriatric-medicine unit. The primary outcome was a composite of patients with PPI stopped or dose reduced, and a PPI deprescribing algorithm was used to standardize the deprescribing method for eligible patients. A retrospective chart review was completed pre-intervention to determine deprescribing rate. The indication for PPI was evaluated through chart review and discussion with patient/patient's family and prescriber (s). In patients eligible for deprescribing, the dose was reduced and monitored as per algorithm.

Results:

Total of 72 patients were enrolled (n=36 pre, 36 post). Pre-intervention, 12 patients had their PPI deprescribed; 9 patients (75%) had their PPI stopped, 3 patients (25%) had dose reduction. After the intervention, 25 patients had their PPI deprescribed; 18 patient's (72%) had their PPI stopped, 7 patients (28%) had dose reduction. PPI deprescribing increased from 31% to 69% after intervention (p=0.0043).

Conclusion(s):

Significant increase in PPI deprescribing was noted with this intervention. This PPI deprescribing algorithm is feasible in a geriatric-medicine population who are medically stable, and this pilot presents future opportunities to reduce PPI overuse in a similar population.