Depresscribing Proton Pump Inhibitors in the Elderly

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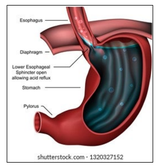
Background

- Proton Pump Inhibitors (PPI) treat symptoms of GERD and Peptic ulcer disease and are widely prescribed today.
- Long term PPI use in the elderly has been associated with:
  - Bone loss and fractures
  - Pneumonia
  - C difficile
  - Vitamin/mineral deficiencies [4, 5].
- Continuous use without trials of periodic reevaluation and deprescribing can lead to adverse effects with long term complications.[1,3,4,5]



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Criteria

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Beers criteria: Avoid scheduled use for >8 weeks unless for high risk patients (ex oral steroids or chronic NSAID use), erosive esophagitis, Barrets esophagitis, pathological hyper secretory condition, or demonstrated need for maintenance treatment

START/STOPP criteria >65 age with conditions where no contraindication to prescribe exist
STOP--Discontinuing or reducing dose of PPI therapy in older adults who have been on therapy for >8 weeks for uncomplicated peptic ulcer disease or erosive peptic esophagitis.
START-- if severe GERD or peptic stricture requiring dilation.

American Gastroenterological Association (AGA)
GERD: 8 weeks of treatment of GERD symptoms relief and healing of erosive esophagitis

Objective

To improve appropriate PPI medication use in the elderly at the NHC by determining if attempts were made to prescribe the lowest effective dose for the shortest period of time, stepped down or completely stopping PPI use if unnecessary.

Methods

- Retrospective chart review
- Convenience sampling based on availability and accessibility at the NHC
- Inclusion criteria:
  - -Age >65
  - -Taking PPI for ≥ 8wks with controlled symptoms.
- Exclusion criteria
  - -Chronic NSAID use
  - -Oral steroids
  - -Hx of bleeding GI ulcer
  - -Barret's esophagus.

Question: Was there a deprescribing trial done?
Monitor: Check at follow up if symptoms controlled, was dietary and lifestyle modifications enough, an H2 blocker attempted first before restarting, rechecking for H pylori, only restarting if severe GERD, or lifestyle modifications have failed[2].


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Aims: Decrease the risks of adverse drug events (ADE's) in the elderly from PPI use, reduce cost for patients and the healthcare system as a whole.

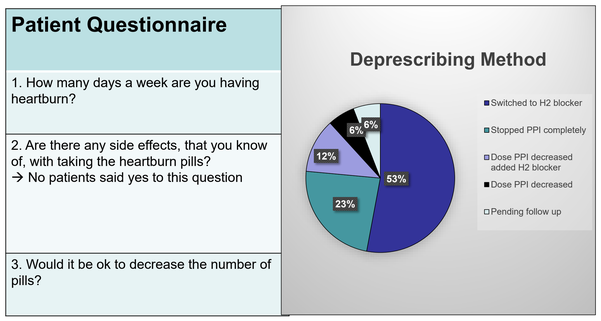
Results

Initial Chart Review
20 charts patients >65 on a PPI seen in 8/2020

- 50% (n=10) on PPI >8 weeks without reassessing symptoms or deprescribing
- 25% (n=5) attempt was made to lower the dose, switch to an H2 blocker or stop PPI completely.
- 25% (n=5) met exclusion criteria.

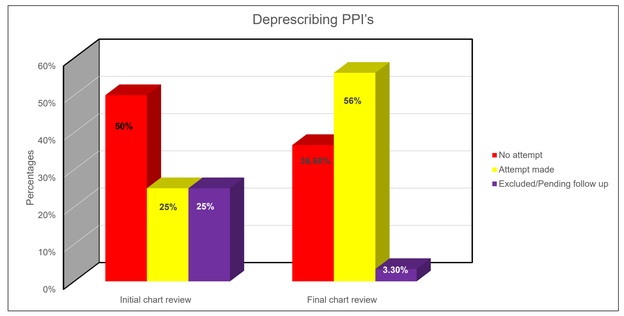
Intervention:

- Designed a form which assessed patient's symptoms, if they were aware of adverse effects, and if they were open to deprescribing.
- Educated physicians and staff



Final Chart Review
40 charts patients >65 on a PPI seen in a 6 month period from 8/2020-2/2021. 75% (n=30) met appropriate inclusion criteria and 25% (n=10) excluded.

- 56% (n=17) of the time there was a reassessment of symptoms by the provider and an attempt to deprescribe.
- 36.6%(n=11) had no reassessments of symptoms with no attempts made to deprescribe.
- 3.3% (n=1) pending follow up.



- Overall there was a 31% increase in attempts by the provider to deprescribe, 13.4% decrease in no attempts made
  - 52.9% (n=9) of deprescribing attempts were successful
  - 11.8% (n=2) attempts were unsuccessful, due to GERD symptoms worsening
  - 35.3% (n=7) are pending follow up for reassessment
- 70.6% of the time lifestyle modifications were documented as being discussed with patients.

Conclusions

There was an increase in attempts to deprescribe PPI's after interventions were in place with over half of the attempts being successful.

This highlights the importance of having methods in place for deprescribing, educating physicians and patients about the side effects of long-term PPI use to decrease adverse drug events and lower costs.

The most favored method by providers was to switch to an H2 blocker followed by stopping PPI completely.

Limitations:
- Small time period of study
- Small sample size
- Possible reassessment of symptoms but lack of documentation
- Generalizability to multiple ethnic backgrounds other than Hispanic
- Loss to follow up

Goal: Certain studies show that there have been successful deprescribing in approximately 80% of cases after 2-4 months, and 80% can also be a goal at the NHC[4, 6].

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