Stress Ulcer Prophylaxis

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This SOP is not yet passed by Q&S and is awaiting an update following the PEPTIC study expected Jan 2020

Please continue to use Rantidine in the meantime.

Intended Use
This SOP is for treating critically ill patients for stress ulcer prophylaxis within Adult Critical Care Unit, University Hospital of Wales Cardiff.

Within the critical care cohort of patients, very few will suffer a clinically important GI bleed, however, it was found that a patient with respiratory failure and/or coagulopathy are at significant risk of having a clinically important bleed with a subsequent 48.5% mortality (Cook et al 1994). In 2015, Krag et al, found that 2.6% of critically ill patients would suffer a significant GI bleed and the associated independent variables were respiratory failure, chronic liver disease, renal replacement, shock and coagulopathy (current or recent).

Due to this significant risk, it is recommended that critically ill patients who are at high risk of GI bleeds receive stress ulcer prophylaxis (Cook et al 1994; The National Institute for Clinical Excellence (NICE) 2012; Krag et al 2015; Rhodes et al 2017; Krag et al 2018) (see appendix), with either H2 receptor antagonist (H2RA) or a proton pump inhibitor (PPI).

However, there have been concerns that the use of medications that raise the gastric Ph will increase the risk of nosocomial infections by increasing the possibility of bacterial overgrowth of the gut. Therefore, resulting in possible clostridium difficile infection or ventilator associated pneumonia (Herzig et al 2009). However, NICE (2018) re-examined the evidence and found **no** consistent, high quality evidence that acid suppression increases patient risk of ventilator associated pneumonia.

In relation to which medication to use for acid suppression, there has been much debate to decide whether H2RA or PPI are superior and if either is more harmful. The most recent study SUPICU by Krag et al (2018) looked at PPI (Pantoprazole) vs placebo, they found a significant increase in amount of clinically important GI bleeds in the intervention group.

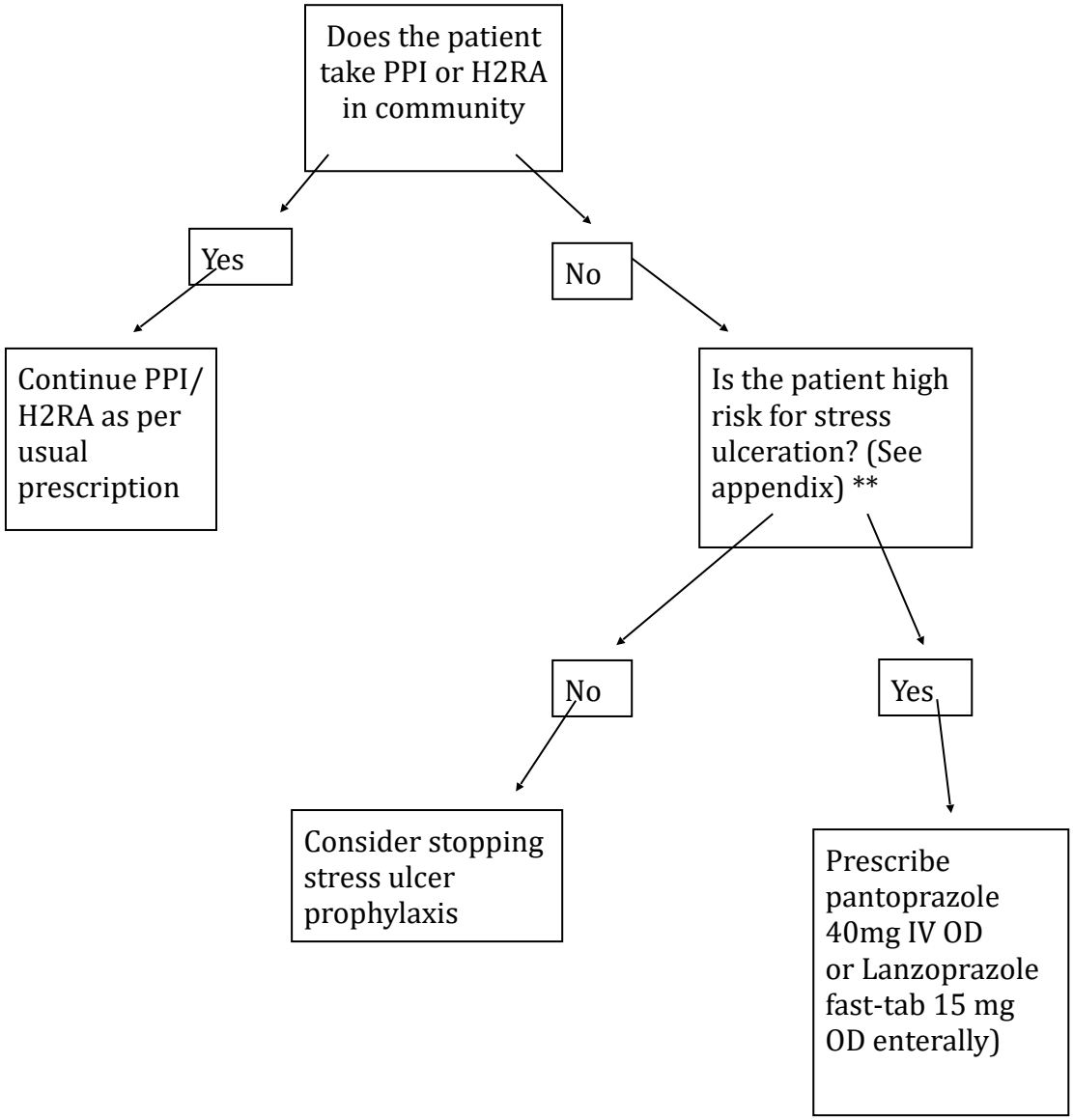
Regular Medication
Patients who usually take PPI's or H2RA in the community, should continue with their regular medication.

Feeding
Early enteral feeding should be considered, however, there is no clear evidence that feeding alone reduces the risk of developing a stress ulcer.

Pregnancy
PPI and H2RA are advised to be avoided in pregnancy – discuss on a case by case basis with consultant.

Other Cautions:

PPI use may cause hypomagnesaemia, especially if combined with digoxin administration.
Tacrolimus and theophylline levels may be less predictable with lansoprazole administration.
Omeprazole may decrease the efficacy of clopidogrel.
PPIs can rarely cause SCLE (subacute cutaneous lupus erythematosus)-be suspicious of new lesions with arthralgia.



**Please review need for stress ulcer prophylaxis daily
Consider stopping if precipitating factor has significantly resolved

Appendix

High risk

- Respiratory failure (Ventilation for >48 hours)
- Current or recent history (within 6 months) of coagulopathy (platelets <50, INR >1.5, or a partial-thromboplastin time >2.0 times the control value)
- Ongoing treatment with anticoagulant drugs (excluding prophylactic clexane etc)
- High dose vasopressors
- Chronic liver disease
- Acute or chronic renal replacement therapy

(Krag et al 2018)

References

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