PUD Causes: H pylori (type B, chronic gastritis) or NSAIDs (90-95%) Zollinger Ellison syndrome (<1%)

Estimating Annual Risk of Clinical UGI Event with NSAID in an Individual Pt

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Risk Factor</th>
<th>Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age &gt;65 yrs</td>
<td>2.5 (1.5-5.5)</td>
<td></td>
</tr>
<tr>
<td>Presence H pylori</td>
<td>1.5 (1.0-3.0)</td>
<td></td>
</tr>
<tr>
<td>Hx PUD</td>
<td>5.0 (2.0-12.0)</td>
<td></td>
</tr>
<tr>
<td>NSAID (probably ibuprofen, naproxen)</td>
<td>2.5 (1.5-4.5)</td>
<td></td>
</tr>
</tbody>
</table>

NSAIDs (including combination with ASA) increase the risk of chronic gastritis (90-95%) or NSAIDs (90-95%) chronic. Hp

Acute upper GI bleeding, presumed non-variceal 5-10% case-fatality. Sx: dizziness, coffee ground, melena stool

Eradication H pylori
- 6-month complicated ulcer rate: placebo 27.1% vs. eradicated 4.2% (Chan. Lancet 2002:365;9-13)

Glasgow-Blatchford Score (GBS) =7:
1. Age >70 yrs
2. Absence of aspirin use
3. Alcoholism
4. Alcohol abuse
5. Smoking
6. Glucocorticoid use
7. Hemoglobin <100

Gastroscopy
- Upper Gastrointestinal Endoscopy
- Endoscopic Ultrasound
- CT Scan

PUD risk minimizing options, considerations, evidence

Additional Risk Factors
- Wofle et al. NEJM 1999;320:1888-98
- RA, CAD, others, age>60, smoking, chronic systemic glucocorticoid therapy

PPI cotherapy: 50
- Presence H pylori: 1.5 (1.0-3.0)
- Hx PUD: 5.0 (2.0-12.0)
- Age >65 yrs: 2.5 (1.5-5.5)

Zollinger Ellison Syndrome (gastrin-secreting neuroendocrine tumors, 2% are malignant and 1/3 have metastasized by 30% 10y survival)

Secondary prevention
- of recurrent adverse GI events OR 0.34. NNTx1y=34 [Lanas 2011].

Forrest II - Visible vessel (43%)
- Foret class I, IIA, IIB lesion:
- Forest class III, IV:
- Endoscopic investigation +/- endoscopic therapy + Hp test. PPI treatment if primary NSAID/HRP
- Interruption NSAID/ASA therapy for several days.
- Heal ulcer: PPI x 4-6 wks for duodenal, 6-8 wks for gastric ulcer

SELECTED REFERENCES
- 2012;61:646–64.
- Hernandez-Bolmaro BM Medicine 2006; 4:22
- CLASS: JAMA. 2000;284:1247-1255
- AOAA 2005;128:A133. ACCF/ACG/AHA recommends Hp eradication if prior PUD and starting ASA

H pylori therapy similar to chronic PPI therapy, rebleeding @ 5mos: eradication 1.9% vs. omeprazole 20mg 0.9%.

Hp eradication: chronic PPI better than Hp eradication alone: 14.8% vs. 1.6% ulcer complications @ 12 months with lansoprazole 30mg/d vs. placebo [Lai et al. NEJM 2002;346:2039-8]
- Interruption for 8 weeks while ulcer healing? 30-days rebleeding (5.4% placebo vs. 10.3% aspirin, NS), but higher 8-week MORTALITY (12.9 vs. 1.9%)[Ann Intern Med 2011;155:1-9]. Restart aspirin within a few days post-AUG. Switch to clobipridol safer than ASA alone? [CARPIE: GI bleeding 2.68% clobipridol vs. 1.99% aspirin over 1.9y].

Hp eradication similar to chronic PPI therapy. rebleeding @ 5mos: eradication 1.9% vs. omeprazole 20mg 0.9%.

Hp Testing
- [all positive tests must be treated]
- Stool-based: Rapunzel histology, culture, PCR
- Serum-based: ELISA, OATP, PMYW

Forrest IIA: Hp+/ASA-: 5% vs. Hp-/ASA+: 40% (OR 24.1, 95% CI [2.8-231.3])

Primary Prevention
- which of these risk factors are present?

PPI: 4-12 mg/d

Additional Factors

H testing
- 2002;162:2105-10

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References:

[2] Lower-dose misoprostol: OR 0.23 [CDSR CD002296] (0.15-0.40) [Lancet 2010;274:173-9].
[3] Zollinger Ellison Syndrome (gastrin-secreting neuroendocrine tumors, 2% are malignant and 1/3 have metastasized by 30% 10y survival).
[5] 2/3 are neuroendocrine tumors. 30% 10y metastasized by dx. 30% 10y mortality.
[6] Zollinger Ellison Syndrome (gastrin-secreting neuroendocrine tumors, 2% are malignant and 1/3 have metastasized by 30% 10y survival).
[7] Selective references are included throughout the document, as indicated by footnotes and references at the end of the text.