Ulcers & GI Bleeds: As the Stomach Turns

Peter Loewen, Pharm.D. FCSHP
University of British Columbia
Vancouver Coastal Health Authority

Conflict of Interest Declaration

■ No financial conflicts of interests to declare.
H. pylori issues

- All diagnosed H. pylori should be eradicated
- Eradication regimens
  - “Recommended”: OAC x 7d or OMC x 7d
  - “Endorsed”: OMA x 7d or BMT x 14d
- Bacterial resistance in Canada
  - Clarithromycin: <4%
  - Metronidazole: ~20%
  - Prior Metro or Clarithro exposure
- Confirm eradication if PUD hx or persistent sx
- 1-day eradication regimen? (Bi+Amox+Metro+PPI)
- FQ-based regimens?

www.helicobactercanada.org

NSAID-Associated Deaths, USA 1997

### NSAID Gastropathy

- **Endoscopic Lesions**:
  - ~50% have detected lesion
  - 80% have lesions

- **Symptoms**:
  - 30-50% have dyspeptic symptoms
  - 20% have warning symptoms

### Risk factors for NSAID-induced gastropathy

**Definite:**
- Prior history of ulcer
- Dose & duration of NSAID therapy
- Multiple NSAIDs
- Concomitant warfarin or corticosteroid therapy
- Age > 60
- Serious systemic illness (CHF, RA, CAD, others)

**Possible:**
- Concomitant H. pylori infection
- Smoking
- Alcohol
Do NSAIDs differ?
Major GI complications

H.pylori & NSAIDs

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<table>
<thead>
<tr>
<th>H.pylori protective?</th>
<th>Independent harm?</th>
<th>Synergistic harm?</th>
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- Odds ratios for PUD: [vs. no NSAID + Hp(-)]
  - H.pylori positive only: 5.5
  - NSAID use only: 19.4
  - H.pylori + NSAID use: 62
- Eradication in de-novo NSAID users:
  - Symptomatic ulcers @ 6 mos: 12% vs. 34%
  - GI bleeds @ 6 mos: 4% vs. 27%
- Eradication in longstanding NSAID users?

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Henry et al. BMJ 1996;312:1563-1566

Huang et al. Lancet 2002;359:14-22
Ulcer/Bleed on NSAID?

- Omeprazole 20 or 40mg/d superior to placebo, ranitidine, and misoprostol 200 qid for preventing recurrent endoscopic lesions @ 6mos in NSAID users [ASTRONAUT, OMNIUM]
- In H.pylori(+) patients, eradication inferior to omeprazole 20mg/d for recurrent bleeding @ 6mos (18.8% vs 4.4%). [Chan et al. NEJM 2001;344:967-73]
- Eradication+PPI vs. PPI alone?
- Celecoxib vs. diclofenac+omeprazole following NSAID-associated AGIB in H.pylori (-) patients: equivalent for rebleeding @ 6mos (4.9 vs 6.4%) [Chan et al. NEJM 2002;347:2104-10]

Does low-dose ASA cause Ulcers/Bleeds?

\[
\begin{array}{c}
\text{Acute GI Bleeding} \\
\hline
\text{Placebo} & \text{ASA} \\
0 & 1.42 & 2.47 \\
1 & \text{OR 1.66, RRI: 73%} \\
2 & \text{NNH (28mos)-100 = -200 x 1 year} \\
3 & \text{Derry & Loke. BMJ 2000;321:1183-7}
\end{array}
\]
Does ASA dose matter?

![Graph showing odds ratio for gastrointestinal haemorrhage against dose of aspirin.](image)

**Fig 2** Meta-regression of Peto odds ratio for gastrointestinal haemorrhage against dose of aspirin (size of circle is proportional to size of trial).


GI Bleed on ASA?

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- In *H. pylori* (+) patients, eradication **EQUIVALENT** to omeprazole 20mg/d for recurrent bleeding @ 6mos (1.9% vs. 0.9%).
  
  [Chan et al. NEJM 2001;344:967-73]

- In *H. pylori* (+) patients, eradication **PLUS** PPI superior to eradication alone for recurrent bleeding @ 12mos (14.8 vs. 1.6%)
  
  [Chuen et al. NEJM 2002;346:2033-8]

- Almost all recurrences were of **gastric** ulcers
  - Eradicate if duodenal, PPI if gastric?
PL’s Top 5 ways Prevent NSAID-associated ulcers/bleeds

- Don’t use NSAIDs
- Choose the safest NSAID
- Encourage *intelligent noncompliance*
- Minimize dosage using co-analgesia
- Gastroprotection
  - H.pylori eradication?
  - Concurrent PPI therapy? Misoprostol? H2RA?
  - Select a COX-2 Inhibitor?