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Saturday, August 10, 2019

(Plenary)

17:10 - 17:30 Implementing the NICE Guidelines for Reflux in Primary Care

Implementing the NICE guidelines for reflux in primary care

Dr Gary Lim

Gastroenterologist

CDHB

Gastroenterology and Endoscopy Specialists

Canterbury District Health Board
Te Poari Hauora ō Waitaha

Gastroenterology and Endoscopy Specialists

This is the reflux talk

- Try not to fall asleep

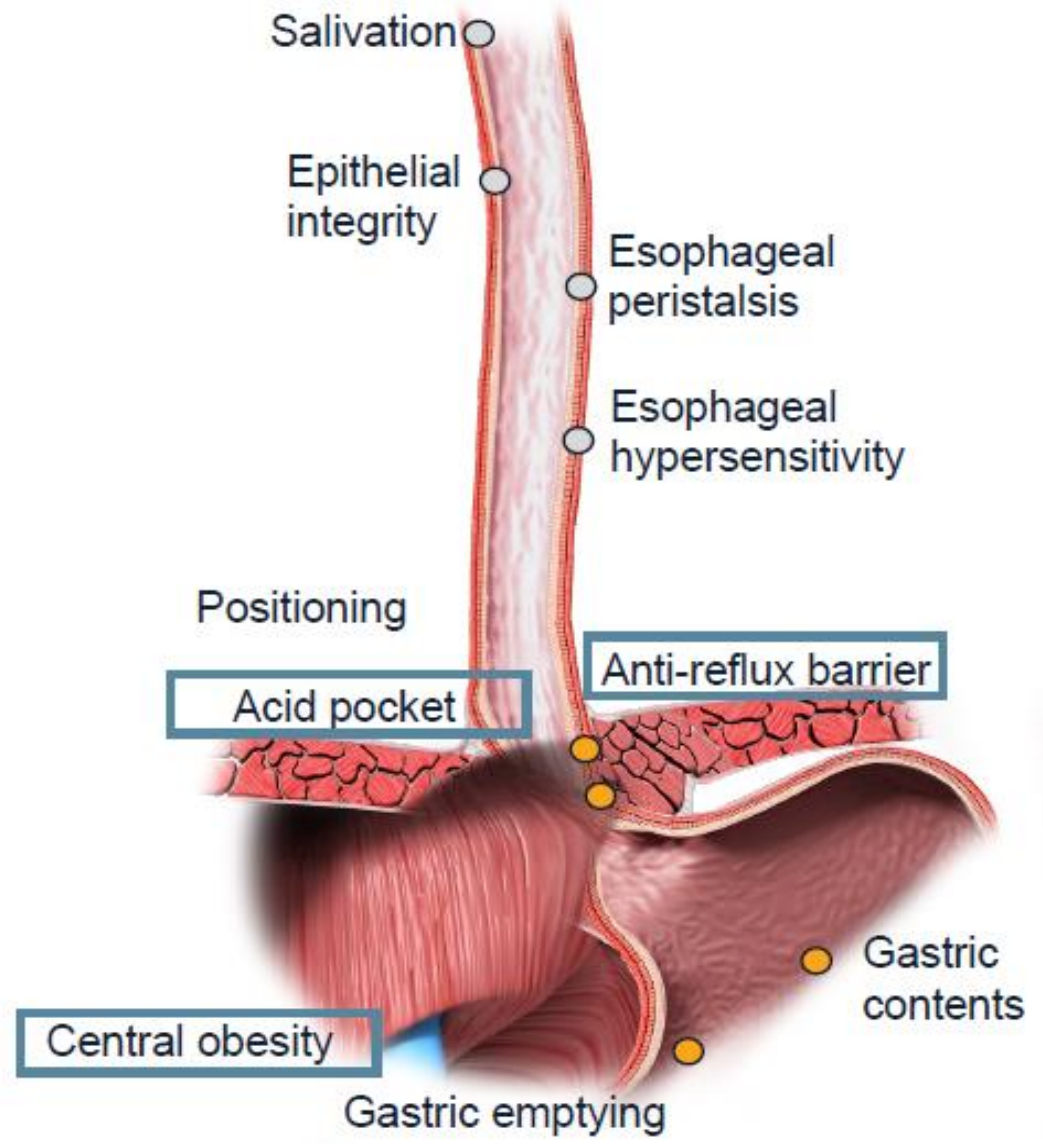
Guidelines, guidelines and more guidelines…

- International
  - NICE – guidelines/pathways
  - BSG – British Society of Gastroenterology
  - ESG – European Society of Gastroenterology
  - AGA – American Gastroenterological Association
  - ACG – American College of Gastroenterology
  - American Journal of Gastroenterology Practice Guidelines
  - Italian Association of Hospital Gastroenterologists
  - World Gastroenterology Organisation – Global Guidelines.

- Local
  - Asia-pacific
  - Gastroenterological Society of Australia
  - Health pathways, individual DHB thresholds

GORD

- Very common
- Increasing prevalence around the world
- Often multifactorial
- TLOSR
- Anti-reflux barrier – hypotensive LES and crura



NICE National Institute for Health and Care Excellence

Gastro-oesophageal reflux disease and dyspepsia in adults: investigation and management

Clinical guideline

Published: 3 September 2014
nice.org.uk/guidance/cg184

NICE National Institute for Health and Care Excellence

NICE Pathways

Managing gastro-oesophageal reflux disease in adults

NICE Pathways bring together everything NICE says on a topic in an interactive flowchart. NICE Pathways are interactive and designed to be used online.

They are updated regularly as new NICE guidance is published. To view the latest version of this NICE Pathway see:

http://pathways.nice.org.uk/pathways/dyspepsia-and-gastro-oesophageal-reflux-disease

NICE Pathway last updated: 30 April 2019

1.2 Common elements of care

- 1.2.1 Offer simple lifestyle advice, including advice on healthy eating, weight reduction and smoking cessation
- 1.2.2 Advise people to avoid known precipitants they associate with their dyspepsia where possible. These include smoking, alcohol, chocolate, coffee, fatty foods and being overweight. Raising the head of the bed and having a main meal well before going to bed may help some people
- 1.2.3 Provide people with access to educational materials to support the care they receive
- 1.2.4 Recognise that psychological therapies, such as CBT and psychotherapy, may reduce dyspeptic symptoms in the short term in individual people
- 1.2.5 Encourage people who need long-term management of dyspepsia symptoms to reduce their use of prescribed medication stepwise: by using the effective lowest dose, by trying “as-needed” use when appropriate, and by returning to self-treatment with antacid and/or alginate therapy (unless there is an underlying condition or co-medication that needs ongoing treatment)

Reducing PPI to the lowest effective dose is a common theme amongst all guidelines

Scarpignato *et al. BMC Medicine* (2016) 14:179
DOI 10.1186/s12916-016-0718-z

BMC Medicine

GUIDELINE Open Access

Effective and safe proton pump inhibitor therapy in acid-related diseases – A position paper addressing benefits and potential harms of acid suppression

Carmelo Scarpignato[1*], Luigi Gatta[1,2], Angelo Zullo[3], Corrado Blandizzi[4], for the SIF-AIGO-FIMMG Group and on behalf of the Italian Society of Pharmacology, the Italian Association of Hospital Gastroenterologists, and the Italian Federation of General Practitioners

- *Patients admitted to hospital are frequently started on PPIs, often inappropriately and these medications are often continued following discharge*

- *Abrupt withdrawal of PPI may lead to rebound acid hypersecretion*

1.3 Referral guidance for endoscopy

- 1.3.1 For people presenting with dyspepsia together with significant acute GI bleeding, refer them immediately (on the same day) to a specialist.
- 1.3.2 Review medications for possible causes of dyspepsia (eg calcium antagonists, nitrates, theophyllines, bisphosphonates, corticosteroids and NSAIDs. In people needing referral, suspend NSAID use.
- 1.3.3 Think about the possibility of cardiac or biliary disease as part of the differential diagnosis.
- 1.3.4 If people have had a previous endoscopy and do not have any new alarm signs, consider continuing management according to previous endoscopic findings

Investigations for uninvestigated dyspepsia (and uninvestigated reflux)

- 1.4.1 Be aware that dyspepsia in unselected people in primary care is defined broadly to include people with recurrent epigastric pain, heartburn or acid regurgitation, with or without bloating, nausea or vomiting
- 1.4.2 Leave a 2 week washout period after PPI use before testing for H. pylori with a breath test or a stool antigen test
- 1.4.3 Offer empirical full-dose PPI therapy for 4 weeks to people with dyspepsia
- 1.4.4 Offer H. pylori “test and treat” to people with dyspepsia
- 1.4.5 If symptoms recur after initial care strategies, step down PPI therapy to the lowest dose needed to control symptoms. Discuss using the treatment on an “as needed” basis with people to manage their own symptoms
- 1.4.6 Offer H2 receptor antagonist therapy if there is an inadequate response to a PPI

WJGPT World Journal of Gastrointestinal Pharmacology and Therapeutics

Online Submissions: http://www.wjgnet.com/esps/
wjgpt@wjgnet.com
doi:10.4292/wjgpt.v5.i2.57

World J Gastrointest Pharmacol Ther 2014 May 6; 5(2): 57-62
ISSN 2150-5349 (online)

REVIEW

Histamine$_2$-receptor antagonists: Rapid development of tachyphylaxis with repeat dosing

Johnson W McRorie, James A Kirby, Philip B Miner

- Tachyphylaxis can occur within 2 days
- Symptom relief may be due to desensitization of the oesophagus to acid
- Longterm better if combined with PPI

GORD Pathways

- Manage uninvestigated “reflux-like” symptoms as uninvestigated dyspepsia
- Offer people with GORD a full-dose PPI for 4-8 weeks. If symptoms continue/recur – PPI at lowest dose
- People who have had dilatation of an oesophageal stricture should remain on long-term full-dose PPI
- Offer people a full-dose PPI for 8 weeks to heal severe oesophagitis
  - Treatment failure – high dose PPI – switch
  - Maintenance – full dose PPI
  - Maintenance failure – clinical review – high dose – switch
- H2RA if inadequate response to PPI

GORD Pathways

- Do not routinely offer endoscopy to diagnose Barrett's oesophagus, but consider it if the patient has GORD. Discuss the person's preferences and risk factors (duration of symptoms, increased frequency of symptoms, oesophagitis, hiatus hernia, oesophageal stricture, oesophageal ulcers, male gender)

GORD Pathways – ongoing care

- Offer people who need long-term management of GORD symptoms an annual review of their condition, and encourage them to try stepping down or stopping treatment (unless there is an underlying condition or co-medication that needs continuing treatment).
- Advise people that it may be appropriate for them to return to self-treatment with antacid and/or alginate therapy (either prescribed or purchased over-the-counter and taken as needed).

Relative potencies compare to omeprazole

- 0.23 pantoprazole
- 0.90 lansoprazole
- 1.60 esomeprazole
- 1.82 rabeprazole

Table 1 PPI doses relating to evidence synthesis and recommendations in the original guideline (CG17; 2004)

PPI	Full/standard dose	Low dose (on-demand dose)	Double dose
Esomeprazole	20 mg[1] once a day	Not available	40 mg[3] once a day
Lansoprazole	30 mg once a day	15 mg once a day	30 mg[2] twice a day
Omeprazole	20 mg once a day	10 mg[2] once a day	40 mg once a day
Pantoprazole	40 mg once a day	20 mg once a day	40 mg[2] twice a day
Rabeprazole	20 mg once a day	10 mg once a day	20 mg[2] twice a day

CYP2C19 polymorphisms

- Omeprazole
  - Poor metabolisers
  - Extensive metabolisers
  - Drug drug interactions
- Switching PPI or doubling dose may help > 20% of patients

1.8 Interventions for functional dyspepsia

- 1.8.1 Manage endoscopically determined functional dyspepsia using initial treatment for H pylori if present, followed by symptomatic management and periodic monitoring
- 1.8.2 Offer eradication therapy to people testing positive for H pylori
- 1.8.3 Do not routinely offer re-testing for eradication, although the information it provides may be valued by individual people

1.9 H pylori testing and eradication

- 1.9.1 Test for H pylori using a carbon-13 urea breath test or stool antigen test, or lab based serology where it's performance has been locally validated
- 1.9.2 *Perform re-testing for H pylori using a carbon-13 urea breath test*
- 1.9.4 Offer people who test positive for H pylori a 7 day BD course of PPI + A + C or M
- 1.9.5 Penicillin allergic PPI + C + M
- 1.9.8 2nd line – PPI + A + C or M

Test performance

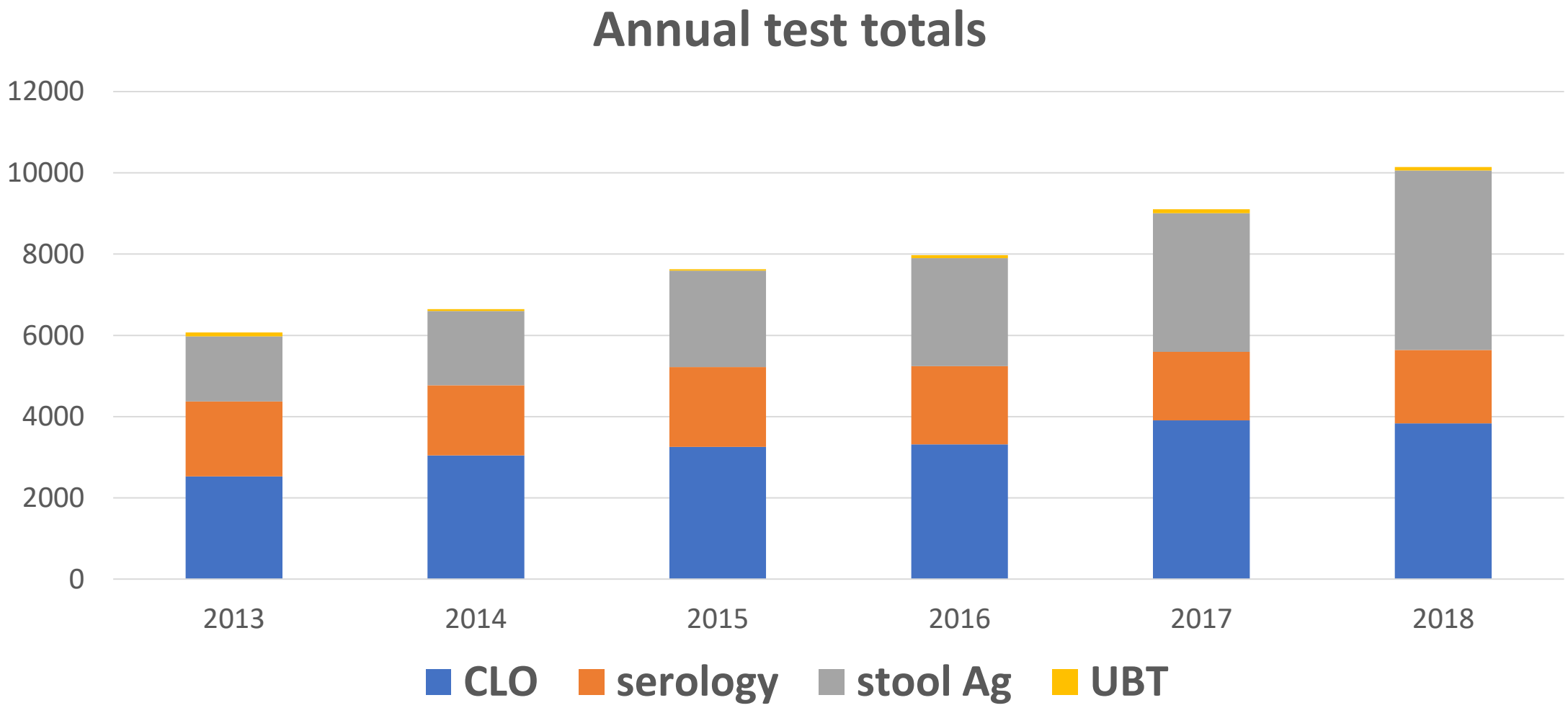
	Sensitivity	Specificity
UBT	95%	96%
SAT	95%	96%
Serology	85-92%	79-83%
CLO	90%	95-100%
Histology H/E	42-99%	100%
Histology IHC	97%	90-100%
MC&S[4]	64%	100%

Test performance on PPIs

Sensitivity on omeprazole:	Baseline	1/52 on 20mg	1/52 on 40mg	2/52 on 20mg	2/52 on 40mg
SAT	93.8%	80%	76%	72%	64%
UBT	93.9%	84%	77%	68%	62%

Manes et al[7]

total of 47,567 tests (2013-2018)



J Kubovy 2019

Journal of Gastroenterology and Hepatology

Gastroenterology

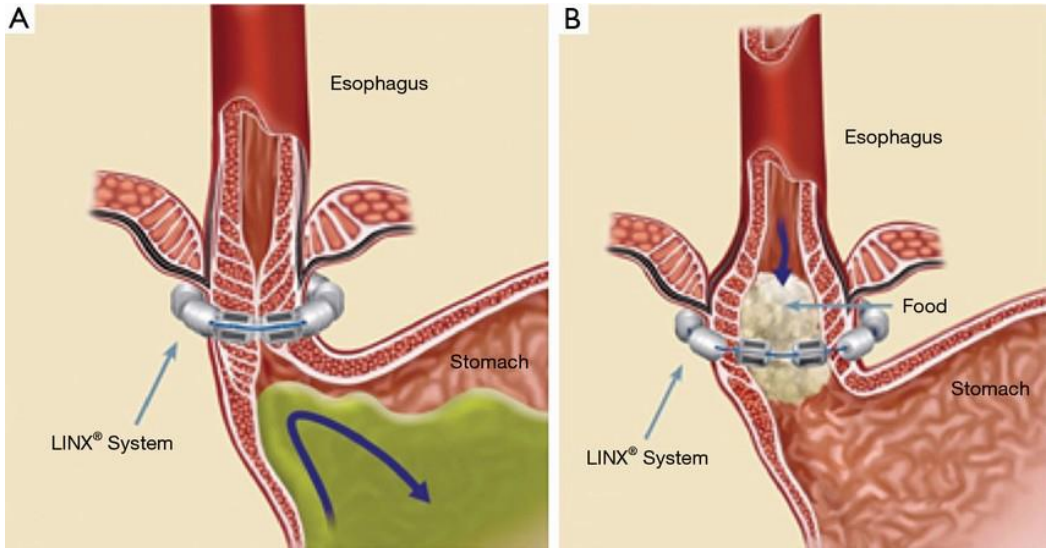
Atorvastatin in combination with conventional antimicrobial treatment of Helicobacter pylori eradication: A randomized controlled clinical trial.

Seyed Saeed Sarkeshikian, Mohammad Reza Ghadir, Faezeh Alemi, Seyed Mahdi Jalali, Ahmad Hormati, Abolfazl Mohammadbeigi

First published: 29 July 2019 | https://doi.org/10.1111/jgh.14810

1.10 Laparoscopic fundoplication

- 1.10.1 Consider if
  - Confirmed diagnosis of acid reflux and adequate symptom control with acid suppression therapy, but who do not wish to continue with this therapy long term
  - Confirmed diagnosis of acid reflux and symptoms that are responding to a PPI, but who cannot tolerate acid suppression therapy



- *Surgical therapy is as effective as medical therapy for carefully selected patients with chronic GERD when performed by an experienced surgeon*
- *20% of patients still require acid suppression therapy*
- *Durability/variability*
- *Unable to vomit/belch*
- *Flatulence*

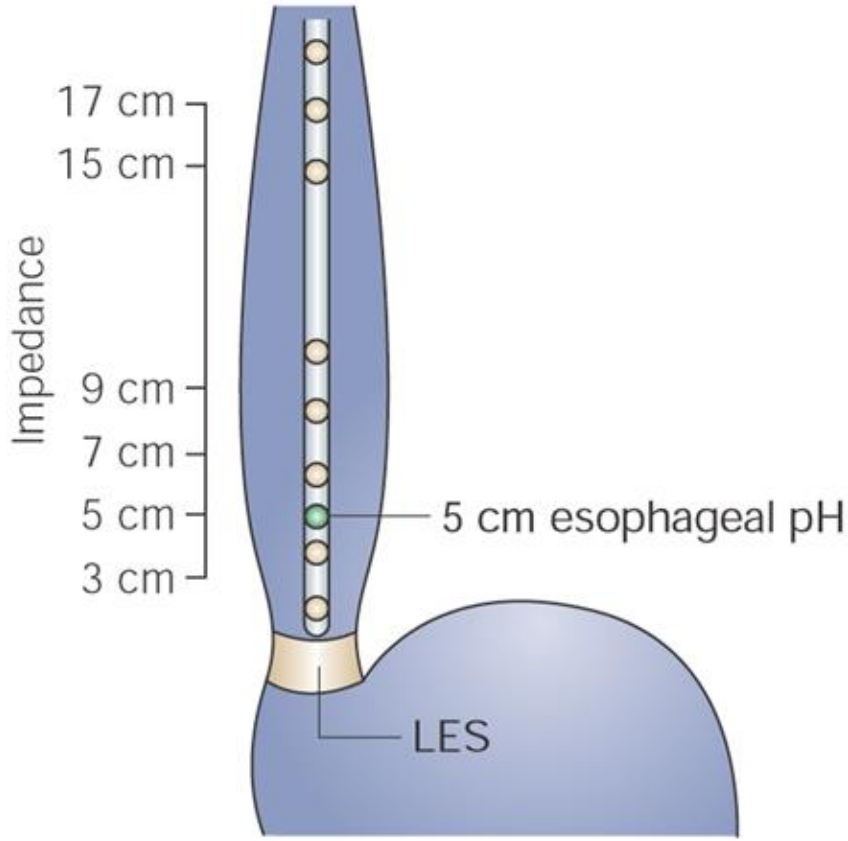
Philip O. Katz, MD[1], Lauren B. Gerson, MD, MSc[2] and Marcelo F. Vela, MD, MSCR[3]

Am J Gastroenterol 2013; 108:308–328; doi:10.1038/ajg.2012.444; published online 19 February 2013

1.11 Referral to a specialist service

- 1.11.1 Consider referral to a specialist service for people:
  - Of any age with GORD symptoms that are non-responsive to treatment or unexplained
  - With suspected GORD who are thinking about surgery
  - With H pylori that has not responded to 2nd line eradication therapy

OLYMPUS GIF-HQ190 Video Gastroscope **17 221 USD**



What is an alginate??

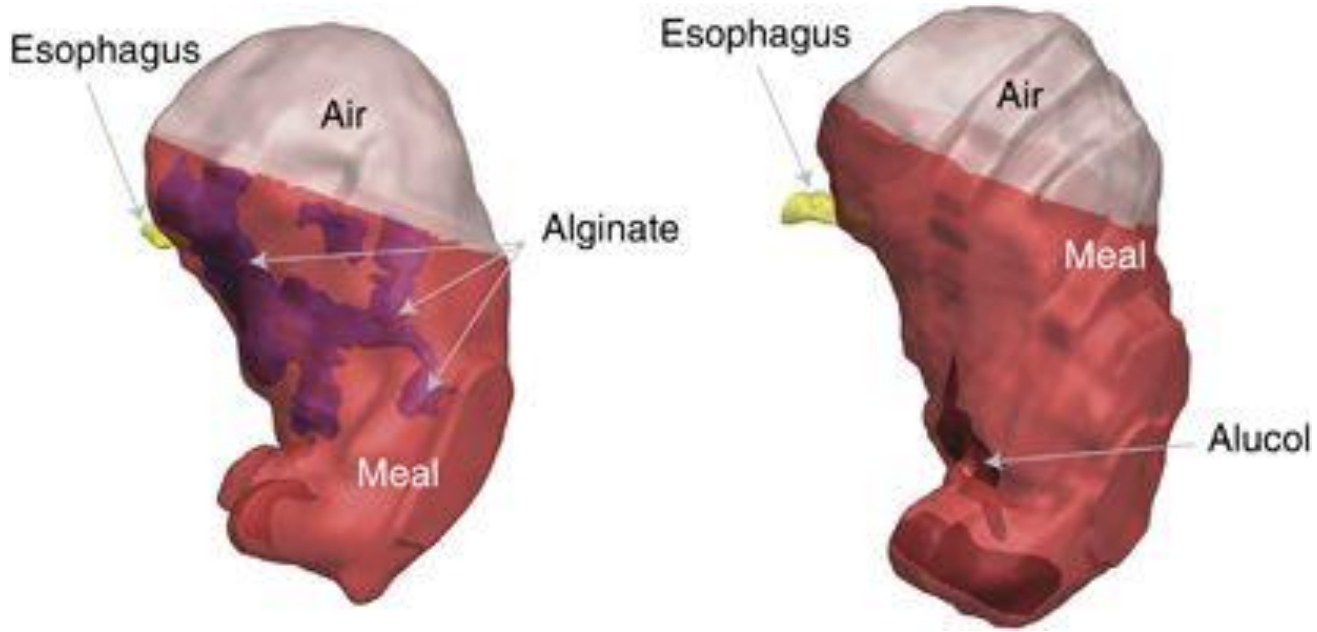
- A polysaccharide distributed widely in the cell walls of brown algae which is hydrophilic and forms a viscous gum when hydrated

AP&T Alimentary Pharmacology and Therapeutics

Gaviscon Double Action Liquid (antacid & alginate) is more effective than antacid in controlling post-prandial oesophageal acid exposure in GERD patients: a double-blind crossover study

A. De Ruigh*,†, S. Roman‡, J. Chen*,§, J. E. Pandolfino* & P. J. Kahrilas*

What is the proximal acid pocket?



1.12 Surveillance for people with Barrett's oesophagus

- 1.12.1 Consider surveillance to check progression to cancer for people who have a diagnosis of Barrett's oesophagus (confirmed by endoscopy and histopathology).

- Emphasize that the harms of endoscopic surveillance may outweigh the benefits in people who are at low risk of progression to cancer

Esomeprazole and aspirin in Barrett's oesophagus (AspECT): a randomised factorial trial

Janusz A Z Jankowski, John de Caestecker, Sharon B Love, Gavin Reilly, Peter Watson, Scott Sanders, Yeng Ang, Danielle Morris, Pradeep Bhandari, Stephen Attwood, Krish Ragunath, Bashir Rameh, Grant Fullarton, Art Tucker, Ian Penman, Colin Rodgers, James Neale, Claire Brooks, Adelyn Wise, Stephen Jones, Nicholas Church, Michael Gibbons, David Johnston, Kishor Vaidya, Mark Anderson, Sherzad Balata, Gareth Davies, William Dickey, Andrew Goddard, Cathryn Edwards, Stephen Gore, Chris Haigh, Timothy Harding, Peter Isaacs, Lucina Jackson, Thomas Lee, Peik Loon Lim, Christopher Macdonald, Philip Mairs, James McLoughlin, David Monk, Andrew Murdock, Iain Murray, Sean Preston, Stirling Pugh, Howard Smart, Ashraf Soliman, John Todd, Graham Turner, Joy Worthingon, Rebecca Harrison, Hugh Barr, Paul Moayyedi

Implications of all the available evidence

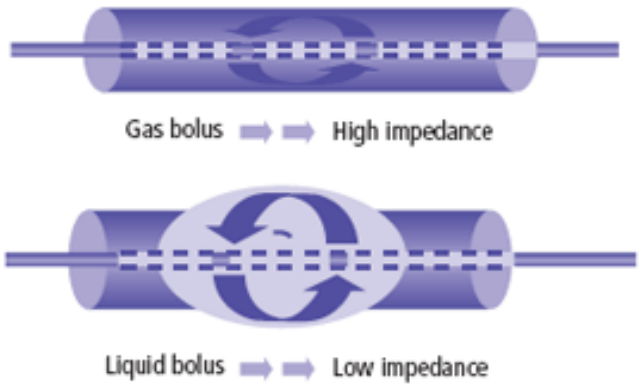
High-dose PPI therapy (80 mg esomeprazole per day) prolonged time to the composite endpoint of all-cause mortality, oesophageal adenocarcinoma, and high-grade dysplasia in patients with Barrett's oesophagus compared with low-dose PPI (20 mg per day). Aspirin also had an effect on these endpoints, but this was only significant when patients who received non-steroidal anti-inflammatory drugs were censored from the analysis. Both treatments seemed to have an additive effect. Clinically significant side-effects were rare.

Asia-pacific guidelines

- A therapeutic trial of PPI is the most pragmatic approach for suspected GORD-related NCCP. Diagnostic yield for endoscopy is low.
- Laryngoscopic findings are unreliable for the diagnosis of laryngopharyngeal reflux and should not be used for diagnosis
  - High dose PPI trial 4-6 months. Upright reflux on functional testing
- Causes of refractory GORD
  - Insufficient inhibition of gastric acid secretion
  - Ongoing weakly acidic or non-acidic reflux
  - Non-GORD causes – dysmotility, EoE, functional heartburn, IBS/visceral hypersensitivity

Functional heartburn

- Pharmacotherapy
  - TCA, SSRI, venlafaxine
  - Acid suppression – single dose PPI or H2RA
- Behavioural intervention
  - CBT/relaxation strategies
- Reassurance



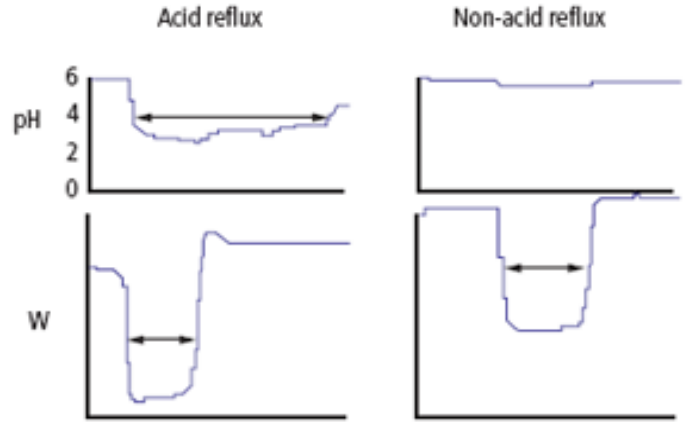
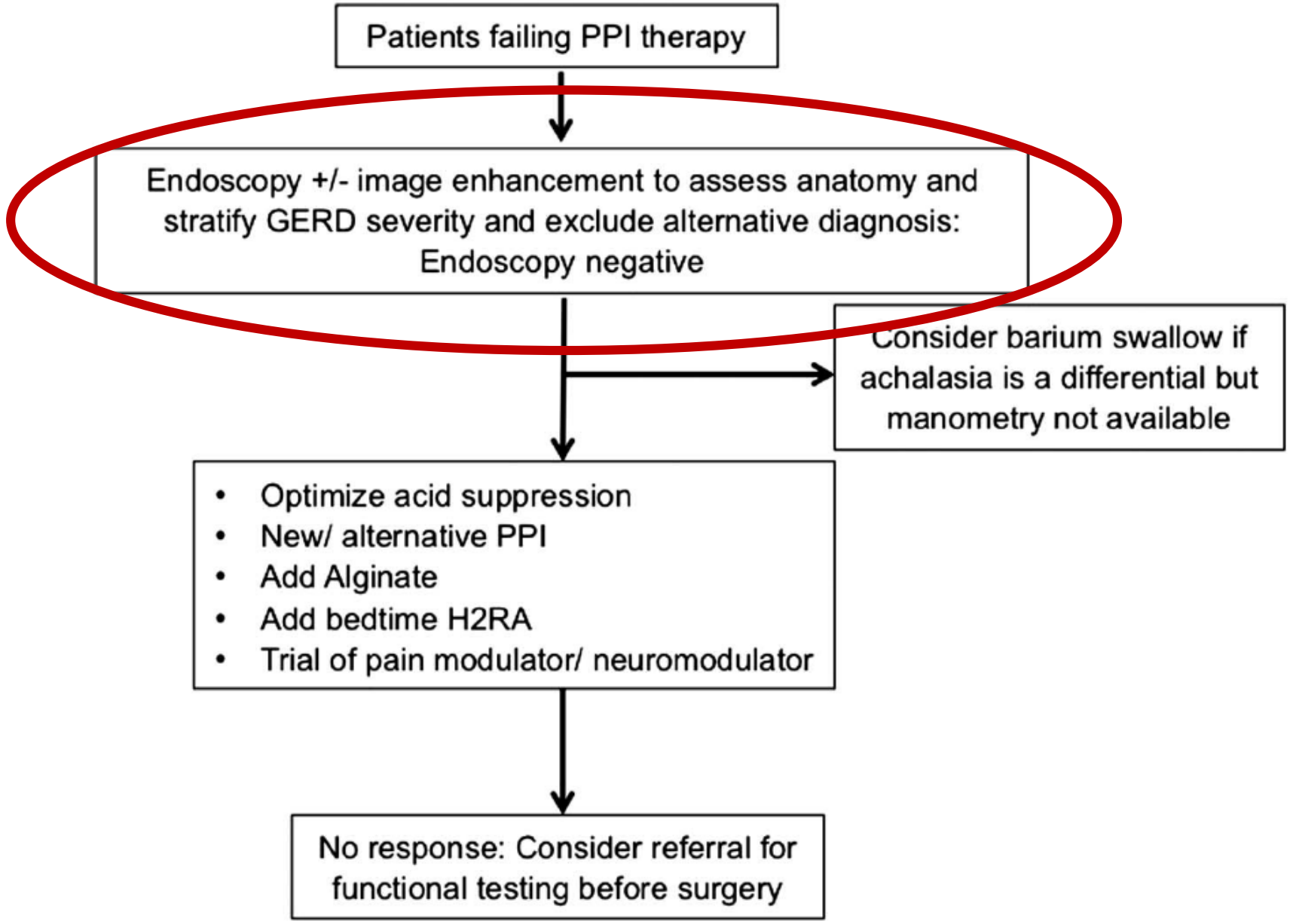
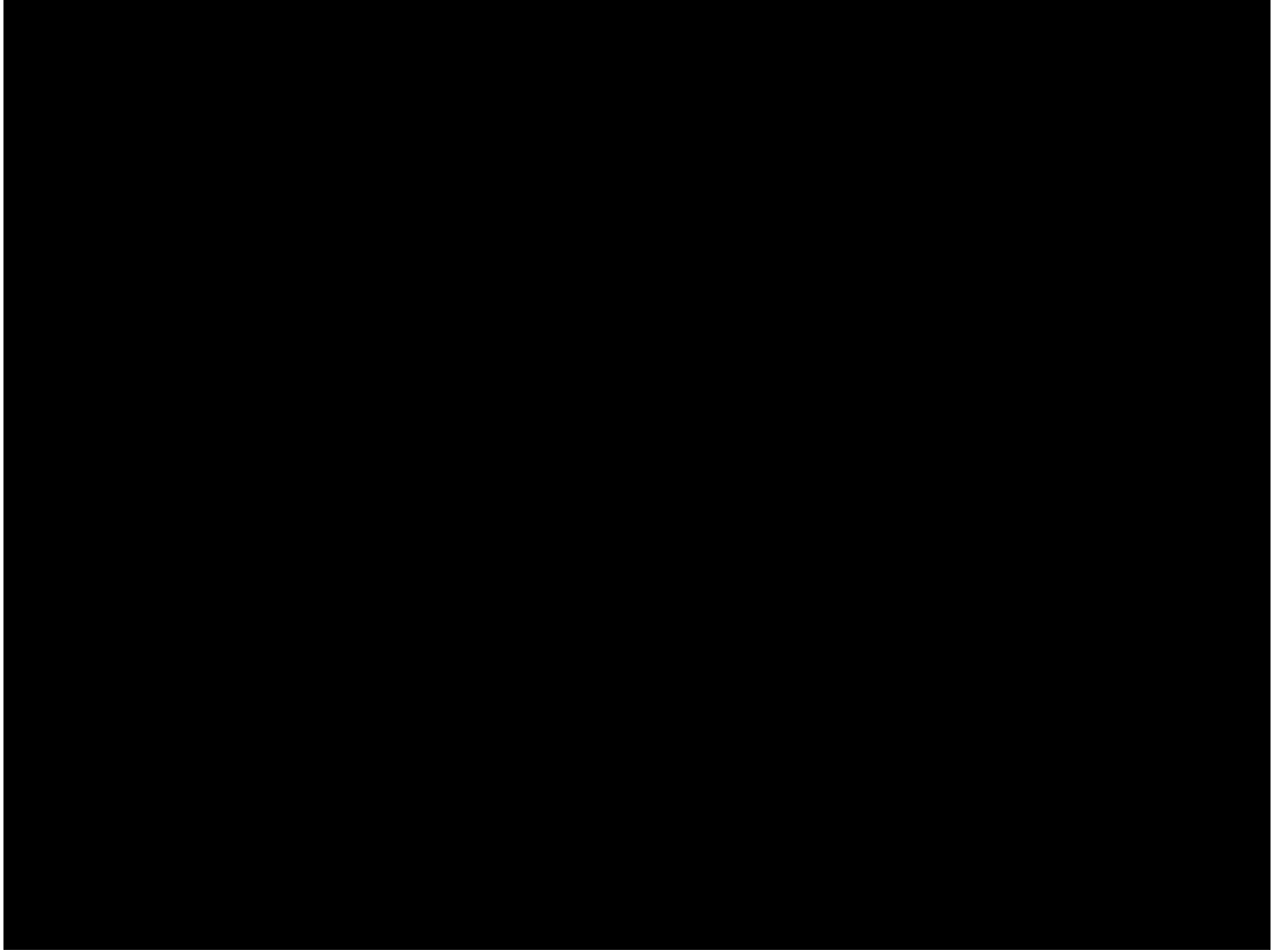


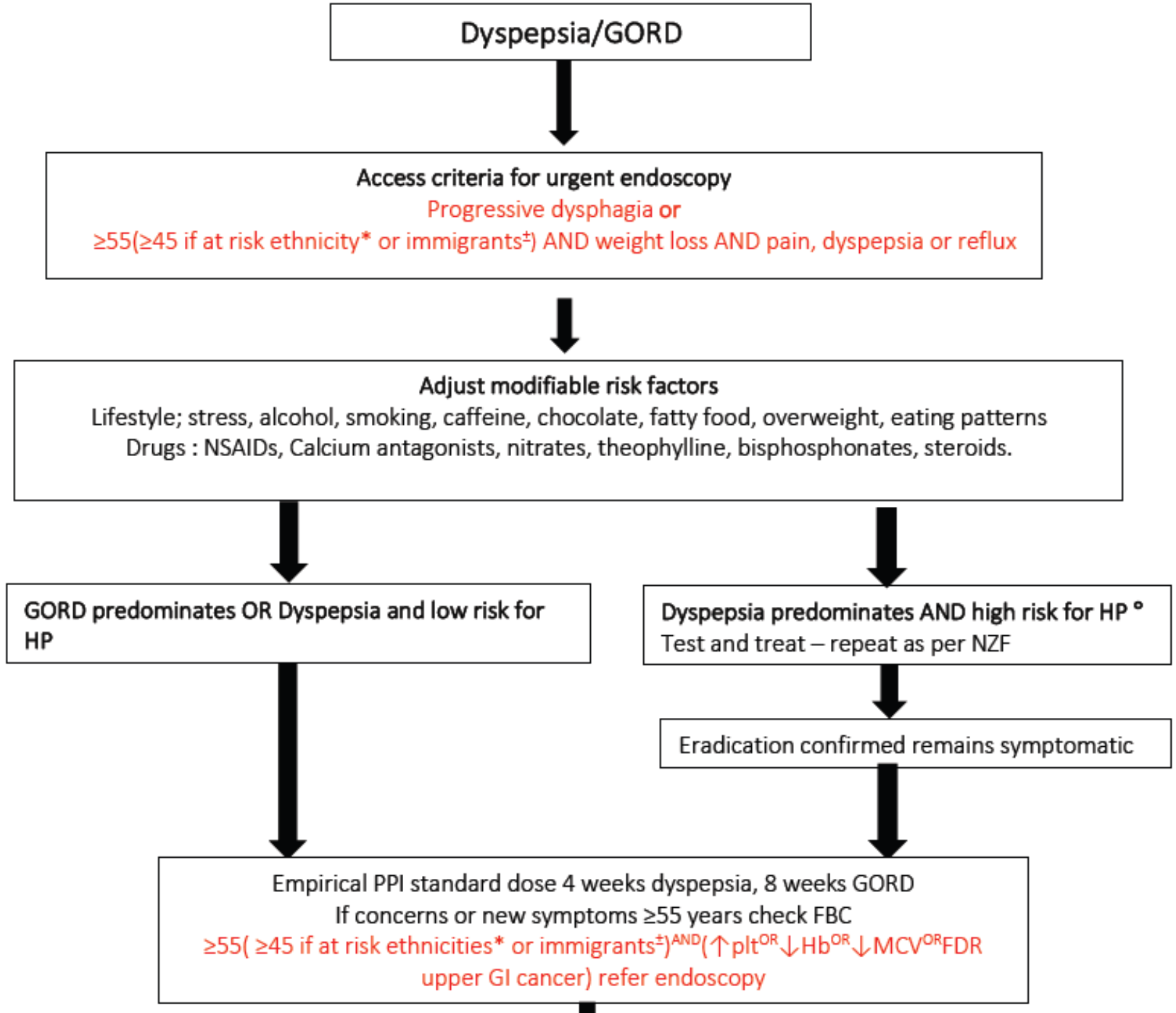
Figure 1 Management algorithm in regions with limited access to functional testing. GERD; gastro-oesophageal reflux disease; H2RA, histamine-2 receptor antagonist; PPI, proton pump inhibitor;





Conclusions

- Patients on longterm PPI – reassess indication/dose annually
- If stopping, taper rather than abrupt withdrawal
- PPI – timing, switching
- H2RA at night
- Alginates stay in the proximal acid pocket
- Resourcing – endoscopy/ph-impedance testing.
- ? Statins in a few years
- Don’t do serology
- Stop PPI 2 weeks before checking HP
- Stops abs 4 weeks before checking for eradication
- Future guidelines? Barrett’s oesophagus – high dose PPI + aspirin


Dyspepsia/GORD
Access criteria for urgent endoscopy
Progressive dysphagia or
≥55(≥45 if at risk ethnicity* or immigrants±) AND weight loss AND pain, dyspepsia or reflux
Adjust modifiable risk factors
Lifestyle; stress, alcohol, smoking, caffeine, chocolate, fatty food, overweight, eating patterns
Drugs : NSAIDs, Calcium antagonists, nitrates, theophylline, bisphosphonates, steroids.
GORD predominates OR Dyspepsia and low risk for HP
Dyspepsia predominates AND high risk for HP °
Test and treat – repeat as per NZF
Eradication confirmed remains symptomatic
Empirical PPI standard dose 4 weeks dyspepsia, 8 weeks GORD
If concerns or new symptoms ≥55 years check FBC
≥55(≥45 if at risk ethnicities* or immigrants±)AND(↑pltOR↓HbOR↓MCVORFDR
upper GI cancer) refer endoscopy

Empirical PPI standard dose 4 weeks dyspepsia, 8 weeks GORD
If concerns or new symptoms ≥55 years check FBC
≥55(≥45 if at risk ethnicities* or immigrants±)AND(↑pltOR↓HbOR↓MCVORFDR upper GI cancer) refer endoscopy

Non response

GORD predominates

1. Review reversible factors
2. Double dose PPI 4-8 weeks
3. ± ranitidine 4 weeks
4. + antacid with alginate for breakthrough
5. Wean to lowest effective dose or stop
6. If long term PPI review 6-12 monthly and encourage lifestyle modification and PPI wean
7. Consider surgery for severe non-responsive reflux

Primary non-response consider alternative diagnosis

Dyspepsia

Test and treat for HP if not done already
≥55(≥45 if at risk ethnicity* or immigrants±) consider referral for OGD if not previously performed

Confirm lifestyle modification.
Stop medications after treatment trial if no benefit

1. Standard dose PPI (H2RA if intolerant of PPI) 4 weeks dyspepsia, 8 weeks if coexistent GORD
2. Domperidone lowest effective dose, 4 weeks
3. TCA
4. Overlap with IBS; consider IBS diet therapy or anti-spasmodics if prominent IBS symptoms
5. Psychotherapy may be available in the private sector.

***At risk ethnicities**
Maori or Pacific
±At risk immigrants
East Asia, Central and South America, South and Eastern Europe, Caribbean
°At risk HP
Past hx peptic ulcer
At risk ethnicity, Maori, Pacific, Asian, African
Childhood spent in developing countries.

Abbreviations:
HP - Helicobacter pylori
plt - platelet
FDR - first-degree relative

Source: Gastroenterology Service, Canterbury DHB, October 2018

Refractory GORD

- Reassess symptoms, optimise PPI, then endoscopy/function testing – impedance pH.

Prokinetics??

- Not recommended by WGO, little benefit

Baclofen

- Good for TLOSRs
- Start low dose at night time
- Titrate up as tolerated

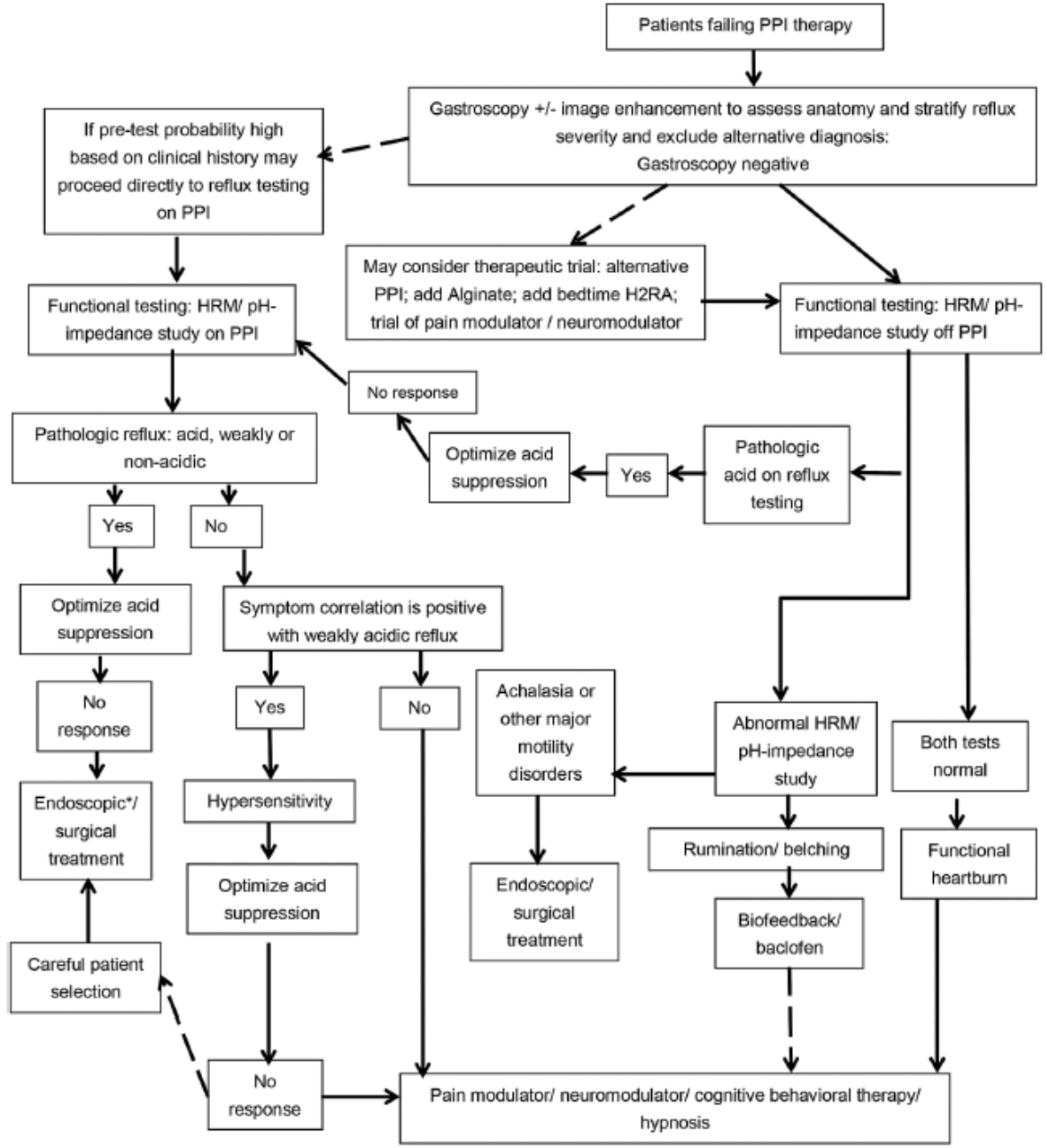
Potential risks associated with PPIs
1. Switching PPIs can be considered in the setting of side-effects. (Conditional recommendation, low level of evidence)
2. Patients with known osteoporosis can remain on PPI therapy. Concern for hip fractures and osteoporosis should not affect the decision to use PPI long-term except in patients with other risk factors for hip fracture. (Conditional recommendation, moderate level of evidence)
3. PPI therapy can be a risk factor for *Clostridium difficile* infection, and should be used with care in patients at risk. (Moderate recommendation, moderate level of evidence)
4. Short-term PPI usage may increase the risk of community-acquired pneumonia. The risk does not appear elevated in long-term users. (Conditional recommendation, moderate level of evidence)
5. PPI therapy does not need to be altered in concomitant clopidogrel users as there does not appear to be an increased risk for adverse cardiovascular events. (Strong recommendation, high level of evidence)

Philip O. Katz, MD[1], Lauren B. Gerson, MD, MSc[2] and Marcelo F. Vela, MD, MSCR[3]

Am J Gastroenterol 2013; 108:308–328; doi:10.1038/ajg.2012.444; published online 19 February 2013

Interventions for peptic ulcer disease

- 1.7.1 Offer H pylori eradication to people who have tested positive for H pylori and who have peptic ulcer disease
- 1.7.2 For people using NSAIDS with diagnosed peptic ulcer, stop the use of NSAIDS where possible. Offer full-dose PPI or H2RA therapy for 8 weeks and, if H pylori is present, subsequently offer eradication therapy
- 1.7.3 Offer people with gastric ulcer and H pylori repeat endoscopy 6-8 weeks after beginning treatment, depending on the size of the lesion
- 1.7.4 Offer people with peptic ulcer (gastric or duodenal) and H pylori retesting for H pylori 6-8 weeks after beginning treatment, depending on the size of the lesion
- 1.7.5 Offer full-dose PPI or H2RA therapy for 4-8 weeks to people who have tested negative for H pylori who are not taking NSAIDs
- 1.7.6 For people continuing to take NSAIDs after a peptic ulcer has healed, discuss the potential harm from NSAID treatment. Review the need for NSAID use at least 6 monthly



H2RA: histamine 2 receptor antagonist; HRM: high-resolution manometry; PPI: proton pump inhibitor
*Endoscopic therapies are options based on approval and device availability

Management algorithm in regions with access to functional testing.

Asia-Pacific consensus on the management of gastro-oesophageal reflux disease: an update focusing on refractory reflux disease and Barrett's oesophagus

Kwong Ming Fock,[1] Nicholas Talley,[2] Khean Lee Goh,[3] Kentaro Sugano,[4] Peter Katelaris,[5] Gerald Holtmann,[6] John E Pandolfino,[7] Prateek Sharma,[8] Tiing Leong Ang,[1] Michio Hongo,[9] Justin Wu,[10] Minhu Chen,[11] Myung-Gyu Choi,[12] Ngai Moh Law,[1] Bor-Shyang Sheu,[13] Jun Zhang,[14] Khek Yu Ho,[15] Jose Sollano,[16] Abdul Aziz Rani,[17] Chomsri Kositchaiwat,[18] Shobna Bhatia[19]