

Our Mission at GastroIntestinal Endoscopy is to deliver experienced and accessible endoscopy services with the highest quality of healthcare standards to improve the health outcomes of patients and the communities we serve.

GIE operates an Open Access Endoscopy Service from four locations:

- **SUNNYBANK** – Brisbane Endoscopy Services
- **CHERMSIDE** – Chermiside Day Hospital
- **EVERTON PARK** – North West Private Hospital
- **AUCHENFLOWER** – The Wesley Hospital



Dr Neville Sandford

NSAID and *Helicobacter pylori* induced gastrointestinal toxicity



Use of nonsteroidal anti-inflammatory drugs (NSAIDs) is widespread and low-dose aspirin (ASA) routinely used for prophylaxis of cardiovascular (CV) disease, but adverse gastrointestinal (GI) effects limit their use. Up to 25% of chronic NSAID users develop ulcers, and 2–4% may bleed or perforate. NSAIDs and *H pylori* are independent risk factors for GI injury.

A prior ulcer complication is the principle risk factor for future NSAID-associated ulcer complications but the risk of GI toxicity is also related to:

- Age >65 yrs,
- High dose NSAID therapy,
- History of uncomplicated peptic ulcer disease (PUD),
- Concurrent use of anti-platelet drugs, corticosteroids or anticoagulants, and
- *H pylori* infection (six fold increased risk of ulcer bleed on NSAIDs).

The risk of GI complications varies with the type of NSAID used, the highest risk is with indomethacin (RR 2.25) followed by naproxen (RR 1.83), diclofenac (RR 1.73), piroxicam (RR 1.63),

ibuprofen (RR 1.43) and meloxicam (RR 1.24). The risk increases with the duration of treatment and the dose of NSAID used. Cyclooxygenase-2 (COX-2) inhibitors are associated with a lower risk of GI bleeding compared with non-selective NSAIDs (RR 0.6). This benefit is abrogated by concomitant use of low-dose aspirin. Aspirin increases the GI bleeding risk twofold compared to placebo, and this risk does not vary with the dose used or with enteric coating. In patients with a prior history of GI bleeding from aspirin, the risk of rebleeding with restarting low-dose aspirin is 14.8%, which can be reduced to 0.7–1.6% by adding a proton pump inhibitor (PPI).

The risk of NSAID induced GI toxicity can be decreased by concomitant use of misoprostol or PPIs, but PPIs are usually better tolerated than misoprostol.

Recent reviews and meta-analyses support the benefit of *H pylori* eradication in patients with a history of PUD in NSAID users (7.4% versus 13.3% risk of ulcer in eradicated group versus control group). NSAID-naive

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PH: 1300 4 GASTRO
www.gastros.com.au



Choosing the 'Open Access' patient

GIE's open access endoscopy service provides an efficient way of accessing endoscopic investigations for your patients. The open access service is ideal for routine procedures in physically fit patients with a clear indication for endoscopy or colonoscopy. Choosing the correct patient to refer for open access procedures, will ensure a seamless process from the booking through to the procedure.

To limit the risk of complications during the procedure, the ideal patient for open access is one with no or few comorbidities. We ask you to

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patients showed more benefit from *H pylori* eradication (OR 0.26) compared with chronically treated patients (OR 0.95). Current evidence suggests that eradicating *H pylori* in NSAID-naive patients can reduce ulcer risk, however in chronic users, *H pylori* eradication alone is ineffective in preventing ulcers and a gastroprotective agent is necessary as well. Concomitant use of NSAIDs with steroids, anticoagulants or antiplatelet drugs increase the risk of ulcer bleeding but there are no studies examining the benefit of *H pylori* eradication in these patients.

Data are sparse concerning *H pylori* eradication in patients on low dose ASA or COX-2 inhibitors at average risk of GI complications and there is no data on the cost-effectiveness of testing and treating *H pylori* in these patients.

Increasing use of PPIs has given rise to concerns about adverse effects and drug interactions from PPI use. PPIs may increase the risk of *Clostridium difficile*

diarrhoea and osteoporotic fractures and also may interfere with the metabolism of clopidogrel but it is unlikely that this interaction results in adverse cardiovascular events. Because of these adverse events, PPI administration should be individualised based on balancing the GI protective benefit with the potential for harm. Although long-term acid suppression has been linked to progression of *H pylori* related atrophic gastritis and premalignant gastric lesions, the methodology of these studies has been questioned. It does seem wise, however, to eradicate *H pylori* in long-term PPI users.

The role of *H pylori* in NSAID-associated GI complications is complex and many factors need to be considered when deciding which patients would benefit from testing and treating *H pylori* and which patients would benefit from adding gastroprotective agents. Based on the available data, the following recommendations can be made.

Recommendations

- Patients with a history of PUD should be tested for *H pylori* prior to commencing NSAIDs or aspirin and treated if positive. They should also be treated with PPIs while on treatment.
- In asymptomatic patients with no history of ulcer who are not taking NSAIDs, consider testing for *H pylori* before commencing NSAID therapy. Average-risk patients using NSAIDs chronically are unlikely to benefit from *H pylori* testing and eradication.
- Use the lowest dose and shortest duration of NSAID treatment possible.
- If multiple risk factors (see above), consider COX-2 selective inhibitor or non-selective NSAID plus a PPI or misoprostol.
- Use PPI's with NSAID if any risk of GI toxicity.
- Avoid NSAID in patients with high risk from both GI and CV standpoints.
- GI toxicity on NSAIDs may be asymptomatic. Recommend upper endoscopy if unexplained anaemia, iron deficiency, dyspepsia, or overt GI bleeding.

These recommendations are made on the basis of clinical trials and it is important to individualise the management of patients on or commencing NSAIDs according to the patient's individual clinical situation.



consider the biological age of the patient and generally patients aged between 15 and 80 years will be suitable. Having knowledge of the patient's BMI is also essential for an appropriate booking to be made. We can usually accommodate patients with a BMI <40. Patients with a BMI close to or >40 need to be aware that their choice of location may be limited to a hospital facility (not a day surgery facility) and the amount of sedation may need to be limited.

A clear reason for the procedure and sufficient detail in the referral letter will also assist in the bookings process. It is important that a list of current medications be included in the referral so considerations such as the patient's diabetes status

and patients on anticoagulants and antiplatelet agents can be appropriately managed prior to the confirmation of their procedure.

Thank you for including the relevant information on your referrals to assist us in our bookings process, so we may provide an efficient open access endoscopy service to you and your patients.

For a comprehensive reference on patient selection, please see our *Guidelines for Referring Doctors* on our website www.gastros.com.au/information-for-doctors or email danielle@gastros.com.au for your own copy of the guidelines.

Dr Roderick Roberts

Colonoscopy withdrawal time: how important is it?

One of the problems we have encountered with colonoscopy in the last thirty years has been the incidence of missed colon cancer during colonoscopy. We have failed to see as dramatic a reduction in the incidence of colon cancer as we would have liked to see. There have been intensive efforts in the last ten to fifteen years to try and improve our yield at colonoscopy.

Namely:

- We have realised the importance of careful bowel preparation, in particular split preparations which improve the quality of the prep and enhance visualisation of the mucosa;
- We have seen the progressive improvement in the quality of instruments we use, not just in the image itself but in the physical characteristics of the instrument and the progressive improvements in techniques we use to achieve full examination of the colon;
- We have recognised the existence of flat right-sided adenomas (sessile serrated adenomas) which can be quite difficult to detect; and

- We have recognised the importance of slow and careful withdrawal looking behind colonic folds on withdrawal.

Withdrawal time then is just one potential factor in increasing yield at colonoscopy and it is becoming more regularly reported. It is based on relatively recently published data that suggested an average withdrawal time of six minutes improved the yield of colonoscopy as compared with an average withdrawal time of less than that number. I personally report that number, but I regard it more important to spend time washing the colon, carefully analysing the mucosa with enhancing techniques such as dye spraying or Narrow Band Imaging, looking behind folds and re-examining areas that are known to be difficult to see well such as the right colon, behind flexures and in the sigmoid colon. Probably a better assessment of overall colonoscopy performance is the adenoma detection rate. This is also being measured by colonoscopists around the world and locally.



New e-referral templates

Upgraded e-referral templates are now available for Medical Director and Best Practice.

You can locate them on our website www.gastros.com.au to download and import. These templates can also be utilised to send referrals electronically through Medical Objects.

Should you require a visit from GIE to assist you to import this template for your practice, please contact Danielle Talbot on 0408 180 435 or danielle@gastros.com.au

Frequently Asked Questions Dr Roderick Roberts

Q Can you provide clarification and recommendations for patients requiring endoscopy who are on Brilinta?

A This question is really a more general question about which patients should cease and which patients should continue all forms of anti-coagulation prior to endoscopic procedures. The answer will depend on the individual patient, the reason the anti-coagulant or anti-platelet agent is administered and the nature and risks of the procedure contemplated. Specifically with upper GI endoscopy as a general principle I do not stop anti-platelet agents such as Brilinta. I would be reluctant to take many biopsies or embark on other interventions in that circumstance. The situation for colonoscopy and polypectomy is somewhat different and as a general principle I like to cease anti-platelet therapy prior to polypectomy particularly for the larger polyps. Brilinta reversibly binds to the ADP platelet receptor and its effect is largely lost by five days. Its excretion does not depend on renal function but it is dependent on hepatic metabolisms of some modification of that time may be necessary for very significant liver disease.

Q Can you explain eosinophilic oesophagitis and the approaches to treatment?

A We first recognised eosinophilic oesophagitis in paediatric medicine affecting boys more than girls and in that setting early data suggested that implementing an elimination diet to exclude foodstuffs such as peanuts, eggs, soy, cow's milk, wheat and tree nuts was effective in about 75% of all children treated. This seems to be less effective in adults. However these elimination diets need to be applied with vigour and preferably with the assistance of a dietician. The second approach is to use topical glucocorticoids most frequently fluticasone which is administered using the metered dose inhaler but removing the spacer. The medication is sprayed onto the patient's mouth at the back of the tongue and swallowed with a small amount of fluid. Obviously it is not inhaled. Budesonide has also been used as a viscous slurry. The addition of a proton pump inhibitor is often used although the relationship between gastro-oesophageal reflux disease and eosinophilic oesophagitis is somewhat unclear. There does at times seem to be overlap and the two approaches to treatment can be synergistic.

If you require A5 referral pads, please contact one of our four locations below.
Electronic referral templates can be downloaded from our website www.gastros.com.au



GIE practice locations and contact details For all appointments, call 1300 4 GASTRO (1300 4 427876)

Brisbane Endoscopy Services

Suites 16–18
McCullough Centre
259 McCullough Street
Sunnybank QLD 4109

Phone: 07 3344 1844
Fax: 07 3344 2739

Chermside Day Hospital

Level 1
Chermside Medical Complex
956 Gympie Road
Chermside QLD 4032

Phone: 07 3120 3407
Fax: 07 3120 3443

The Wesley Hospital

3rd Floor, East Wing
451 Coronation Drive
Auchenflower
QLD 4066

Phone: 07 3870 3799
Fax: 07 3870 5069

North West Private Hospital

Endoscopy Unit
137 Flockton Street
Everton Park
QLD 4053

Phone: 07 3353 3322
Fax: 07 3353 9325

Private practice locations and contact details

DR RODERICK ROBERTS MB BS FRACP AGAF

Main Rooms: Level 2, Suite 62, Ballow Chambers
121 Wickham Tce, Brisbane QLD 4000
Phone: 3831 2704 | **Fax:** 3835 1069

DR WILLIAM ROBINSON MB BS FRACP

Main Rooms: Level 4, Suite 85, Sandford Jackson Building
30 Chasley St, Auchenflower QLD 4066
Phone: 3870 7433 | **Fax:** 3870 7466

DR NEVILLE SANDFORD BSc (Med) MB BS (1st Class Hons) FRACP AGAF

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DR ANDREW BRYANT MB BS FRACP Dip Av Med (Otago)

Main Rooms: Level 2, St Andrew's Place
33 North St, Spring Hill QLD 4000
Phone: 3831 7238 | **Fax:** 3831 7261

DR HUGH SPALDING MB BS FRACP BVSc PhD

Main Rooms: St Andrew's Hospital,
Level 7, Suite 4, St Andrew's Specialist Centre
457 Wickham Tce, Spring Hill QLD 4000
Phone: 3831 4044 | **Fax:** 3831 0622