

CLINICAL CHALLENGE

Stroke Prevention And Peptic Ulcer Disease

Question:

A 65-year-old male patient of mine with a past medical history of transient ischaemic attacks recently developed epigastric pain. He has been on soluble aspirin and endoscopy which confirmed a small peptic ulcer. How should I manage this patient?

Comments:

This patient presents with two separate problems which pose potential threats: transient ischaemic attack(s), and uncomplicated peptic ulcer disease, linked by association with aspirin therapy.

Antiplatelet therapy, principally aspirin, is the recommended treatment for patients with transient ischaemic attacks and non-disabling strokes with proven efficacy in reducing the incidence of stroke and cardiovascular deaths. This patient should also be investigated with a carotid duplex scan to exclude significant extracranial artery disease. Several multicenter randomized trials,¹⁻² for example the North American Symptomatic Carotid Endarterectomy Trial (NASCET),¹ has demonstrated that patients with transient ischaemic attacks with corresponding carotid stenosis of greater than 70% benefit from carotid endarterectomy compared with medical treatment alone. With improving duplex technology and a good quality vascular technologist, carotid endarterectomy can be performed on duplex criteria alone without arteriogram.

The two major causes of peptic ulcer disease include *Helicobacter pylori* and non-steroidal anti-inflammatory drugs (NSAIDs). The National Institutes of Health Consensus Development Conference has recommended the addition of antimicrobial agents to antisecretory drugs to treat all patients with *H. pylori*-associated peptic ulcer

disease.³ To date, one of the best regimens for eradicating *H. pylori* is a one-week course of triple therapy containing a proton pump inhibitor and two antibiotics.⁴ The interaction between *H. pylori* and NSAIDs in peptic ulcer disease is currently unsettled.

Two large, randomized, double-blind, multicenter, controlled studies (Acid Suppression Trial: Ranitidine versus Omeprazole for NSAID-Associated Ulcer Treatment [ASTRONAUT]⁵ and Omeprazole versus Misoprostol for NSAID-Induced Ulcer Management [OMNIUM]⁶ have recently been published addressing the issue of treatment and prophylaxis of NSAID-associated peptic ulcer disease. The trials examined the efficacy of omeprazole, 20 mg and 40 mg once daily, compared with ranitidine⁵ or misoprostol,⁶ for the healing of peptic ulcer disease (gastric or duodenal ulcers or > 10 erosions) in patients who required, and continued to receive NSAIDs. Both studies reported superior results (77%) in treatment success (ulcer healing and relief of dyspeptic symptoms) by a four to eight weeks regime with both doses of omeprazole compared with ranitidine (63%) or misoprostol (71%). In the patients who had a duodenal ulcer and taking NSAIDs, 93% of the ulcers were reported healed at eight weeks with omeprazole 20 mg once a day. Duodenal ulcers, small ulcers, and positive tests for *H. pylori* were favourable factors for overall treatment success. The treatment was also well tolerated.

The same studies also assigned patients who had their ulcers successfully healed to a maintenance treatment with omeprazole 20 mg daily compared with ranitidine or misoprostol, and again a lower relapse rate was reported with omeprazole, where 60-70% of patients taking the proton pump inhibitor remained in remission at the end of six months.

With this background, omeprazole, 20 mg daily should be the treatment of choice for healing the duodenal ulcer associated with aspirin therapy. This should be

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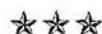
followed with a course of maintenance with omeprazole, and aspirin should be continued for its demonstrated benefits for cerebrovascular disease. The presence or absence of extracranial carotid disease should be documented with a carotid duplex ultrasound to correlate with the symptoms of transient ischaemic attack. Should a high-grade (> 70%) carotid stenosis be identified, carotid endarterectomy has been shown to carry a distinct benefit in stroke-free survival and should be recommended. ■

The comments have

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