

ON THE SURGICAL MANAGEMENT OF DUODENAL PEPTIC ULCER DISEASE

Though the incidence of duodenal ulcer disease seems to be on the wane it still affects 5-10 % of the population.¹ This fact alone renders it a major issue in public health. At least four main factors appear to be important in the pathophysiology of this disease: gastric acid secretion, pepsin activity, mucosal defenses and gastric motility.² Although acid production is, indeed, necessary for an ulcer to occur the available evidence shows that about 2/3 of DU patients secrete acid in the normal range. This finding seems to render, in fact, any measure aiming only at decreasing acid secretion somehow as one which wisdom is open to question. Furthermore it has been shown that if we are perseverant and wise enough to merely lend supportive measures to these patients, without any particularly specific therapy, let alone more aggressive ones, around 2/3 of them will become asymptomatic after 10-15 years of follow-up.³ It appears, therefore, that the most talked-about indication for surgical therapy of DU, that is *medical intractability*, is, in a rather sizable proportion of patients so classified, more the result of a lack of patience and wisdom both from the physician and patient alike rather than from the ulcer diathesis itself.

Though it is difficult to avoid surgery in a significant number of situations of bleeding, pyloric emptying disturbances and, obviously, perforation it seems honest to surmise that improved medical care and the availability of better anti-ulcer agents (Cimetidine, Ranitidine, Sucralfate) will, eventually, cut down the toll of these complications. A recent paper in this Journal⁴ prompted us to outline a few considerations since some discrepancies were borne out.

The surgical therapy of DU has evolved from the radicality of removing the distal 2/3 of the stomach towards the conservative, rational, approach of Proximal Gastric Vagotomy over the past 10-15 years having gone by the moderate stage of truncal vagotomy plus a simple drainage procedure or an antrectomy, after the pioneering work of Lester Dragsted in the early forties. However all these measures are aimed at decreasing the acid production levels or even abolishing them, without too much consideration being paid to the other forementioned ulcerogenic factors. Only proximal gastric vagotomists seem to worry about in keeping at least part of the antral motility and defending the gastric mucosa from aggressive bilio-pancreatic enteric secretions. It is commonly stated that the best operation, accepting as such the one with less recurrences, is truncal vagotomy plus antrectomy and this is, indeed, no wonder since both the target and the weapon are wiped out, but at what expense??. To top this amputation off most gastrectomists reestablish the gastrojejunal flow by utilizing one of the Bilroth I or II types of reconstruction with its inevitable increase in entero-gastric alkaline reflux, which seems to interfere with the normal gastric mucosal defense mechanisms. We strongly believe that conservatism should be the word when it comes to surgical therapy of DU.

Once powerful anti-ulcer agents (H₂ blockers, Sucralfate) became available a DU patient should be considered as medically *intractable* only after a long enough (over 10 years?), correct, treatment has been tried without success, allowing us to surmise that we were unable to overcome the ulcerogenic tide. Proximal Gastric Vagotomy is the procedure of choice in this situation, with or without an accompanying drainage operation according to whether a pyloric fibrotic obstruction is present or

not. If persistent bleeding, though not massive but still interfering with keeping acceptable hemoglobin levels, is the indication, PGV still applies as the wisest approach. If the indication is massive bleeding the more expeditious Truncal Vagotomy with a drainage procedure, after ligation of the bleeding vessel, should be preferred. Conservatism should still be in order when facing a perforated DU. Simple suturing is the wisest attitude in most cases, definitive surgery being reserved for a very few selected patients.

Finally a few words concerning what should be considered the best reconstructive method for drainage procedures or after gastrectomy. Should it be alkaline diverting or not?. Until the exact role of cytoprotection and of the duodenoenteric secretions in contact with gastric mucosa are better known it seems futile to take strong positions in this respect. We, personally, prefer the alkaline diverting type but do agree that true scientific background for this approach is still lacking.

António Mendes de Almeida

Department of Surgery
University Hospital of Santa Maria
Rua das Praças, 43 3.ª Esq.
1200 Lisboa - Portugal

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