SHOULD DUODENAL PERFORATION BE TREATED BY SIMPLE CLOSURE OR DEFINITIVE SURGERY?

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The ideal treatment for the perforation of duodenal ulcer has not yet been established. Accepted methods vary from simple closure to immediate definitive surgery. Simple closure is the general standard procedure against which other methods are evaluated. It is simple, safe and effective for the treatment of emergency problem but provides no protection on long term basis. Several studies have shown that 34 — 76% of patients treated with simple closure become symptomatic[1,2] and 60 — 80% require further surgical treatment, if followed up for 5 years or longer[3]. In each year of follow-up about 1% would bleed and 2% reperforate and these figures rose to 9% when patients were followed upto 17 years[4,5]. Another aspect leading to dissatisfaction with simple closure is increased immediate morbidity and death when there is coexisting haemorrhage, obstruction or a large chronic ulcer[6]. Conservative or nonoperative management was first introduced in 1870[7] and later recommended by others[8,9] who proposed continuous nasogastric suction and use of antibiotics. The results of this procedure are uncertain and it also does not provide any protection for the future. Non-operative management has its place in the management of perforated duodenal ulcer in patients unfit to undergo emergency surgery. Gastrectomy was first carried out for perforation in 1902[10] and subsequently recommended as the treatment of choice in various reports[11-13]. The major criticism for this treatment was that an extensive gastric resection is performed in many cases who may never have recurrence or who might be comfortable on a reasonable medical regimen. Gastrectomy is associated with problems of its own and may not be the ideal treatment for perforated duodenal ulcer. Later vagotomy and pyioroplasty was tried with encouraging results without any mortality and little morbidity like dumping syndrome in 11%[14-16]. Current controversy centres on whether to perform a definitive surgical procedure or simple closure at the time of perforation. Experiences over the past several years have shown that several factors influence the choice of surgical procedures. A patient with a chronic ulcer history, who has an interval of less than 12 hours between perforation and treatment, has no concurrent disease and is less than 60 years of age should tolerate definitive procedure such as vagotomy and pyloroplasty[17]. If there is extensive peritoneal contamination, unexpected anaesthetic problems and when there is no/short (<3 months) history of ulcer symptoms prior to perforation, simple closure alone maybe a better choice[18,19]. Despite the adoption of the principle of immediate definitive surgery by many centres in the West for the past 40 years, majority of perforated duodenal ulcers in our country are still being treated by simple closure as highlighted in an article in this issue of JPMA. Although simple closure is a life saving procedure, the long term results of this procedure need a close scrutiny and review.

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