

ABSTRACT

Duodenal ulcer perforations are most common cause of peritonitis. For almost a century, duodenal perforations have been closed by Omentopexy. In this, pedicled omentum is mobilised over the perforation and secured with full thickness sutures placed on either side of the perforation. this is the "gold standard" for the treatment of duodenal perforations. However, occasionally we have to come across large perforations of the duodenum, in such cases there is possibility of post-operative leakage following closure by this method. Usually, duodenal ulcer perforations are less than 1 cm in greatest diameter, and as such, are amenable to closure by omentopexy. Most of the surgeons feel that mobilization of the pedicled omentum from the colon, and placement of full thickness sutures into the normal duodenum around the perforation makes the efficiency of omental patch safe even in the presence of large sized perforations. However there is controversial evidence from some of the studies conducted which proved free omental graft superior to pedicled omental graft. Moreover there is evidence from studies which concluded that a Free Omental Plug can be used safely and reliably to treat large duodenal perforations that are more than 25 mm in size.

Objective:

To compare the efficacy of Free Omental Graft with GRAHAMS live Omental Graft in patients with duodenal ulcer perforations of size up to 20 mm.

Methodology:

A series of 60 cases of duodenal perforations were studied and analyzed. Among them 30 patients underwent closure of duodenal perforation by Grahams Pedicled Omental Patching and 30 patients underwent Free Omental Patching. The cases were followed up for 1 month. The results were analysed and the two groups were compared with post-operative leak rates, post-operative hospital stay, complications & mortality.

Results:

In this study we found 26.66% of post-operative leak (8 patients), 60% of wound infection (18 patients) in patients treated with Free Omental Patch and 6.66% of post-operative leak (2 patients), 33.33% wound infection (10 patients) in patients treated with Grahams live Omental Patch. we found 13.33% mortality(4 patients) in patients treated with Free Omental Patch and no mortality in patients treated with Pedicled Omental Patch. However the mortality rate was statistically insignificant. The average hospital stay in our series was 11.93 days for Grahams live Omental Patch and 17.03 days for Free Omental patch.

Conclusion:

Grahams live omental Patching was found to be a superior surgical technique over Free Omental Patching for the closure of duodenal perforations measuring upto 20 mm.

Key words: Duodenal perforation, Grahams live omental graft, Free Omental graft.