

## **BACKGROUND AND OBJECTIVE**

Perforation is a common complication of a peptic ulcer Disease. patients with perforation usually complain of sudden onset frequent epigastric pain typically. for many persons it is the first symptom of their peptic ulcer disease.

In this study the integrity of the closure technique using the figure of eight stitch is assessed and compared to the conventional Graham's omental patch closure technique.

This is due to the fact that in patients with high grade septicemia following perforation the omentum is often found to be unhealthy and the edges of the ulcer are indurated, so a safe method of using the figure of eight stitch helps in closure of the perforation and decreases the leak rate, further morbidity and mortality.

## **METHODS**

This is a prospective study comprising 50 patients of perforation peritonitis over a period of six months from March 2017 to August 2017. In this present study, the clinical material consists of patients admitted with perforation peritonitis in the Department of General surgery, at Government Rajaji hospital, Madurai.

The data will be collected in prescribed proforma where in it contains, particulars of the patient, clinical history, clinical examination and diagnosis, relevant investigations, and details of surgery.

The patients were followed for three weeks in post-operative period for postoperative leak, duration of surgery, postoperative morbidity and mortality. Ethical clearance has been obtained from ethical committee of Government Rajaji hospital, Madurai, prior to conducting the study.

## **RESULTS**

In this "comparison of surgical techniques for gastro duodenal perforation closure: A prospective study of figure of eight closure versus Graham's omental patch" Conducted in department of general surgery at Government Rajaji hospital, Madurai from March 2017 to August 2018, a total of 50 patients of perforation peritonitis who underwent figure of eight, were included in this

prospective study, and randomized into two groups based on in-patient number. 34 patients with odd ip no in fig of 8 eight (group a) and 16 patients with even ip no in omental patch (group b) were considered for the study.

Duration of surgery does not have any significance as both the surgeries were having comparable limit, p value 0.734 not significant.

Postoperative leak was found only in 1 case out of 34 cases, p value is .003, found to be significant. Postop mortality was not found in any case of figure of eight repair, where 3 out of the 16 cases of omental repair had postoperative mortality. So in cases of patients presenting with perforation peritonitis in more than 6 hours figure of eight is superior to conventional omental patch in terms of mortality and postoperative leak.

Post operative leak was found only in one case of figure of eight, where 6 cases of omental patch developed leak, and the mortality was not found in cases which underwent figure of eight repair, where one mortality was there in omental group, p value 0.003 regarding postoperative leak and 0.029 regarding mortality rates.

The patients were followed for three weeks. Most of the patients went well without leak, and those who developed leak occurred in the first 5 days itself. In the present study we found that the figure of eight technique significantly decreased the postoperative leak ( $p < 0.003$ ; significant), and mortality (p value  $< 0.029$ ).

## **CONCLUSION**

After analyzing the data and observations, the present prospective study demonstrated that the obliteration of gastroduodenal perforations using figure of eight significantly reduces postoperative leak and mortality when compared with conventional omental patch.

Although the study sample is small in this present study, it is still wise to recommend figure of eight for patients presenting very late or when healthy omentum is not available.

## **KEYWORDS**

Figure of eight, omental patch, gastro duodenal perforation, safer technique, fig of 8.