Laparoscopic Vagotomy: Feasible Option for the Chronic Peptic Ulcer Patient

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Background: Highly selective vagotomy was developed to avoid dumping syndrome, diarrhea, bile reflux, and poor gastric emptying; the idea was to avoid vagal denervation of viscera other than the parietal cell mass.

Objective: Preliminary review of the cases which underwent laparoscopic highly selective vagotomy.

Design: Retrospective study.

Setting: Surgical department, Salmaniya Medical Complex, Bahrain.

Method: Cases of laparoscopic surgery for chronic peptic ulcer disease were retrospectively reviewed through their records from 1st January 1997 to 31st December 2003. Data were obtained about personal characteristics, operative time, complications and length of hospital stay.

Result: The average age of these patients was 44.9 years, ranging from 33 to 64 years. Nine patients were males and two patients were females. Five patients had laparoscopic highly selective vagotomy. There were no immediate postoperative complications in this group. The average length of hospital stay was 7.8 days ranging from 3-17days. Five patients had laparoscopic truncal vagotomy with open pyloroplasty. The complications reported in this group were a case of intestinal obstruction and another case of persistent symptoms. The average length of hospital stay was 16 days, ranging from 6 to 46 days. One patient underwent laparoscopic truncal vagotomy with gastro-jejunostomy due to gastric outlet obstruction. The patient had intestinal obstruction postoperatively.

Conclusion: Laparoscopic highly selective vagotomy has a significantly lower complication rate than other laparoscopic surgeries for chronic peptic ulcer disease, which makes it a feasible option. However, the hospital stay for these surgeries are higher than reported studies which hinders its cost-effectiveness.