Can Pancreatitis develop after Laparoscopic Gastric Band insertion surgery?

M Mulla, S Griffiths, I Beckingham, M Larvin, R Singh

Citation

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Abstract

Morbid obesity is a growing problem in the Western world. It is attributed to an abundance of food combined with a disposition toward less physical activity in the course of our daily existence(1). BMI >35 kg.m-2 (body mass index) is associated with a range of adverse health effects including hypertension, increased risk of cardiovascular insulin-resistant diabetes mellitus, dyslipidemia and osteoarthritis(2). Several psychosocial manifestations including depression, poor self-esteem, sexual dysfunction, and unemployment have also been associated with morbid obesity(3). Different strategies including dietary advice, behaviour therapy, pharmacologic and surgical intervention have been used to control obesity. Surgical options include bypass surgery or laparoscopic gastric banding. Although laparoscopic gastric banding is a safe operation, several early and late complications of laparoscopic banding have been reported in literature(4).

We present a case of pancreatitis post laparoscopic gastric band insertion which to our knowledge has not been reported.

CASE REPORT

A 38 year old lady with an initial weight of 114 kg and BMI of 41 was referred by the GP for gastric band insertion. This lady had been unable to reduce her weight by conventional methods and for several years had been suffering from back pain and plantar fasciitis attributed to her weight. There was no other significant past medical history reported. She was listed and underwent laparoscopic adjustable gastric band insertion in the next couple of months. The procedure went well and no complications were reported. Post-operatively, she became febrile with associated epigastric tenderness. She was commenced on intravenous cefuroxime and metronidazole and a CT scan of her abdomen was performed which showed changes consistent with pancreatitis (Fig 1).

Figure 1

Figure 1: Showing peri-pancreatic inflammatory changes (arrow) of acute pancreatitis



Laboratory tests performed at this stage showed a raised white cell count of 13.24, amylase of 33, and urinary amylase of 131.She received supportive treatment and intravenous antibiotic therapy for a total of 5 days, after

which she made a full recovery from this episode of pancreatitis. There were no subsequent complications and the patient attended routine band adjustment twelve weeks later.

DISCUSSION

In 1993, Belachew et.al. implanted the first Lap-Band(4). This has now been widely accepted by surgeons all over the world because of its simplicity and fewer complications. However, several intra-operative, early and late complications have been reported. Port/band infection, bleeding, regurgitation and oesophageal reflux, band migration and pouch dilatation are well established and reported early and late complications.(5, 6) Commonly reported intra-operative/iatrogenic complications include gastric perforation, splenic and liver injury, oesophageal tear and intra abdominal sepsis (4, 7). Indeed it is possible to cause injury to the pancreas gland during port insertion and even when using liver retractor.

To the best of our knowledge, post-operative pancreatitis from any cause after gastric banding has never been reported in literature. In this case there was no evidence of any intra-operative injury to the pancreas or its surrounding structures. No other cause, metabolic or otherwise could be attributed for the CT findings of acute pancreatitis seen in this case. Although we do not directly associate the cause of pancreatitis to gastric band surgery but without any cause in

this case, the question of any association between gastric band insertion and pancreatitis remains open.

CORRESPONDENCE TO

Mr.MG G Mulla Department of Surgery Derby City General Hospital Uttoxeter Road Derby. DE22 3NE. UK Email: m.mulla@nottingham.ac.uk Tel: +44 (1332) 724702 Fax: +44 (1332) 724697

References

- 1. Popkin BM, Doak CM. The obesity epidemic is a worldwide phenomenon. Nutr Rev. 1998 Apr;56(4 Pt 1):106-14.
- 2. Executive summary of the clinical guidelines on the identification, evaluation, and treatment of overweight and obesity in adults. Arch Intern Med. 1998 Sep 28;158(17):1855-67.
- 3. Wing RR, Greeno CG. Behavioural and psychosocial aspects of obesity and its treatment. Baillieres Clin Endocrinol Metab. 1994 Jul;8(3):689-703.
- 4. Belachew M, Legrand M, Vincent V, Lismonde M, Le Docte N, Deschamps V. Laparoscopic adjustable gastric banding. World J Surg. 1998 Sep;22(9):955-63.
- 5. Pomerri F, Liberati L, Curtolo S, Muzzio PC. Adjustable silicone gastric banding for obesity. Gastrointest Radiol. 1992 Summer;17(3):207-10.
- 6. Wiesner W, Schob O, Hauser RS, Hauser M. Adjustable laparoscopic gastric banding in patients with morbid obesity: radiographic management, results, and postoperative complications. Radiology. 2000 Aug;216(2):389-94.
 7. Chapman AE, Kiroff G, Game P, Foster B, O'Brien P,
- Ham J, et al. Laparoscopic adjustable gastric banding in the treatment of obesity: a systematic literature review. Surgery. 2004 Mar;135(3):326-51.

Author Information

M.G. Mulla

Department of General Surgery, Derby City General Hospital

S. Griffiths

Department of General Surgery, Derby City General Hospital

I. Beckingham

Queen's Medical Centre, Nottingham

M. Larvin

Department of General Surgery, Derby City General Hospital

R. Singh

Department of Radiology, Derby City General Hospital