LAPAROSCOPIC INCISIONAL HERNIA REPAIR: DO AGE, BODY MASS INDEX, SIZE OF DEFECT AND COMPLEXITY OF PREVIOUS OPERATIONS PREDICT LENGTH OF HOSPITAL STAY?

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Aims: Laparoscopic repair of incisional hernias is becoming more common and its benefits in terms of shorter length of hospital stay are well documented. However, most previous studies did not report whether age group, body mass index (BMI), size of defect and previous operations are predictive for increased hospital stay. The aim of this study is to investigate if age, BMI, size of defect and complexity of previous operations influence length of hospital stay following laparoscopic incisional hernia repair.

Methods: A prospective study looking into 32 consecutive elective cases of laparoscopic incisional hernia repair performed by single surgeon in a District General Hospital from June 2007. For all cases 3 ports (2x5 mm and 1x10 mm) and an intra-abdominal composite polypropylene mesh with a 5 cm margin were used. We analysed patients above the 70 years old, of high BMI (35 kg/m2 or more). Size of mesh used ranged from 10–9 x 20–42 cm. 18 patients (54.5%) had mesh 20 cm or more. Pre-operative operation ranges from simple (appendicectomy) to complex (aneurysm repair/major bowel surgery). The length of hospital stay ranges from 1–9 days (median 1 day). Major surgery 29/33 (87.9%) were discharged the following day. No conversion to open was recorded in any cases. Regression analysis did not show higher age group, BMI, defect size or the complexity of previous operation increase the risk for a prolonged hospital stay.

Conclusions: This study suggests that laparoscopic incisional hernia repair can be carried out safely and the benefit of shorter hospital stay is valid regardless of age group, BMI, defect size or the complexity of previous operation. Hence, these factors should not influence patient selections for such procedure.
SHORT TERM OUTCOME OF BARIATRIC SURGERY IN A DISTRICT GENERAL HOSPITAL

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Aims: Prevalence of morbid obesity is in the rise with no signs of slowing. Relying on limited number of bariatric units to fight the nation’s battle against obesity might not be enough. The aim of this prospective longitudinal study was to examine short term outcome of bariatric surgery in a district general hospital setting.

Methods: 55 consecutive morbidly obese patients with a mean body mass index (BMI) of 54 (± 9.4) underwent bariatric surgery. Operative time, hospital stay, and complications were recorded pre-operatively. At one year, percent excess weight loss (%EWL), resolution or improvement of obesity comorbidities, and health related quality of life (HRQOL) were measured. Changes in HRQOL were assessed using the SF-36 health survey.

Results: Mean age was 41 (±10.1) of whom 73% were females. Bariatric procedures performed were 26 (47%) laparoscopic adjustable gastric band, 16 (29%) endoscopically placed gastric balloon, 10 (18%) laparoscopic sleeve gastrectomy, and 3 (6%) laparoscopic Roux-en-Y gastric bypass. There were no deaths, and no conversion to laparotomy. Operative time and hospital stay were comparable to the published literature (gastric band 31 min, 1 day; gastric balloon 13 min, 1 day; gastric sleeve 105 min, 4.8 day; gastric bypass 125 min, 7.3 day). One gastric sleeve patient had bleeding from the staple line for which he was taken back to theatre to control bleeding. No other major early or late postoperative complications were recorded. Mean %EWL was 40.1 (P = 0.001) corresponding to average weight loss of 29.5 kg (P < 0.001).

At one year, diabetes mellitus cure or improvement was 78% (P = 0.052), hypertension 73% (P = 0.062), hyperlipidemia 81% (P = 0.045) ischemic heart disease 64% (P = 0.045) and obstructive sleep apnea 80% (0.053). Preoperative HRQOL scores were generally poor, particularly in domains of energy and general health. At one year, HRQOL impairment statistically significantly improved across all domains ranging from 39% to 92% (P < 0.001).

Conclusions: Bariatric surgery can be performed safely and effectively in a district general hospital which may help take the pressure off busy bariatric units. Weight loss, obesity comorbidities and HRQOL considerably improved at one year after bariatric surgery without compromising operative time, hospital stay, and complications.