Bariatric

Introduction

The best results in bariatric surgery are achieved by tightly integrated teams able to provide more than just consistent high quality surgical procedures but pre and post surgical nutritional, social and emotional support to well motivated, fully informed committed patients.

Absolute contraindications – here are few for bariatric surgery:

- ASA Score 4 or above
- Pre-existing “non trivial” malignancy

Relative contraindications include:

- Significant co-morbidities unlikely to be arrested or improved by bariatric surgery
- Uncontrolled psychiatric conditions (psychosis, severe neurosis or addiction)
- Previous gastric surgery or abdominal irradiation
- Non-dietary causes of obesity (neurological e.g. prada-willi syndrome, steroid induced etc.)
- BMI less than 35

Criteria

Four major criteria (Impact on Life, Likelihood of achieving maximum benefit with respect to control of diabetes, Duration of Benefit and Surgical Risk) are used to characterise the need and potential to benefit of each particular patient for whom surgery is recommended as the best treatment option. Each of these major criteria has multiple categories to enable an accurate representation for every patient.

The prioritisation score might be determined at three points along the elective surgery chain: determination of access to FSA, at FSA to determine surgical access and after the period of ‘compliance assessment’ to re-establish surgical treatment order.

Prioritisation

Bariatric Surgery

Impact on life

Indicate which of the following conditions are reported by the patient and the patient has been advised treatment for.

The “score” assigned to each of the impact on life conditions represents an assessment of reversibility of that condition if present rather than a absolute measure of the direct impact on the patient’s life. Therefore, at this point the “severity” or patient response to treatment is currently not assessed.

- Lifestyle includes such things as participation in family or other activities (including paid or unpaid work), choice of clothes, self esteem issues etc.
- Impacts on life (such as Hypertension, Dyslipidaemia, OSA or GRD) are defined to be present “because they require active treatment”.
- NASH (Non alcoholic steatohepatitis). Diagnosis of NASH requires disturbed liver function tests, liver fibrosis on FIBRESCAN and alcohol intake of <20g/day (or fatty deposition, inflammation and fibrosis on liver biopsy).
- Arthritis (mild) is arthritis exacerbated by obesity restricting activities of daily living but as an accompanying symptom rather than Arthritis (with significant limitation) where the obesity is considered to be a contraindication for surgery to fix the problem or the duration of benefit of the surgery is considered to be extremely adversely affected by the patient’s obesity.
- Obs/Gynae issues include such things as having a history of diabetes of pregnancy or eclampsia complicating previous pregnancies and the desire for more children. The non-fertility part of PCOS would also be captured here but should not be repeated if PCOS is the “cause” of infertility.

Diabetes characteristics (selected in the next section) also contribute automatically to this impact on life assessment as follows:

- Impaired glucose tolerance test, or
- Diabetes managed solely with diet and/or oral medications, or
- Insulin is used to try to improve the diabetic control

- Lifestyle
- Hypertension
- Dyslipidaemia
- Urology (e.g. stress incontinence)
- Gastrointestinal reflux disease (GRD)
- Mild Arthritis
- Arthritis with significant limitation
- Non alcoholic steatohepatitis (NASH)
- Obstetric / Gynaecological issues
- Renal (Including hyper filtration)
- Infertility
- Obstructive sleep apnoea (OSA)

Likelihood of achieving maximum benefit with respect to control of diabetes

Benefit has three components:

- Quantum
- Likelihood
- Duration

The quantum of benefit is difficult to determine at this point. With respect to the reversal of diabetes, and the benefit accrued from that, more is known about the key factors:

- Type of medication required (none; Diet or oral, Insulin)
- Duration of active treatment of diabetes (< 4 yrs, 4-7 yrs, > 7 years)
- Control achieved (HbA1c < 53 >) mmol/mol

These factors can be used to estimate the likelihood of achieving the maximum control of diabetes in this group of patients.

Diabetes

- Diabetes
- Abnormal glucose tolerance test (iGTT)
- Neither

Type of medication required

- Diet or Oral
- Insulin

Duration of active treatment of diabetes

- < 4 Years
- 4 - 7 Years
- > 7 Years

Control achieved

- HbA1c >= 53
- HbA1c < 53

Duration of Benefit

Determination of the duration of benefit is taken from ‘reversal of years of life lost’ tables using Gender, BMI and Age.

Gender

- Female
- Male

Age

BMI

Surgical Risk

Determination in this situation is relative risk, absolute risk is determined when the decision is made that the patient would benefit over all (Question One decision) and that surgery would be offered (if it were available). The relative risk is used to determine who should be treated first (Question Two) on the assumption that the lower risk patient, all other things being equal, would be treated first. Relative risk is determined by giving one point each to: Male gender (captured above), Age >= 45, (captured above) BMI >= 50 (captured above), Hypertension and Risk of pulmonary embolism.

Risk of pulmonary embolus includes history of superficial or deep vein thrombosis or previous PE, coagulation abnormalities, use of oral contraceptive or malignancy.

- Hypertension
- Risk of Pulmonary Embolism