Medico–legal issues in bariatric surgery

Omar Khan
Consultant Upper GI and Bariatric Surgeon, Whittington Hospital, London

Marcus Reddy
Consultant Upper GI and Bariatric Surgeon, St Georges Hospital, London
Obesity surgery

- Obesity or bariatric surgery is a new branch of surgery
- Bariatric procedures are amongst the most widely recognised surgical operations
  - Increasing incidence
  - High public profile
  - Media exposure
- Seven deadly myths about obesity surgery
Obesity is not a real disease just a modern fad
Venus of Willendorf
Henry VIII
Obesity– trends over time

- Obesity has been omnipresent in all human populations
- Increasing socio-economic wealth has enabled more of the population to fulfil their obesogenic potential
# Trends in population obesity rates

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<thead>
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<th>1983</th>
<th>1993</th>
<th>2003</th>
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<tbody>
<tr>
<td>USA</td>
<td>17%</td>
<td>24%</td>
<td>30%</td>
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<tr>
<td>UK</td>
<td>8%</td>
<td>13%</td>
<td>24%</td>
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<tr>
<td>FIN</td>
<td>5%</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>DOG</td>
<td>&lt;1%</td>
<td>3%</td>
<td>7.6%</td>
</tr>
<tr>
<td>KOR</td>
<td>&lt;1%</td>
<td>1.5%</td>
<td>3.2%</td>
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High levels of obesity are an inevitable consequence in any mammalian population with easy access to energy–dense food sources.
The obese spend all day eating food
Trends in energy consumption

- Eating patterns of obese and non-obese over time
  - Increased proportion of carbohydrates and fat
  - Overall increase in calorific intake over time
  - Increase is similar in all BMI groups
- People of normal weight have been eating more over the last 30 years
- Obese do eat more calories as compared to people of normal weight
  - Part of it is to maintain their metabolic status
  - Even correcting for this there is an excess calorific intake
The difference between the obese and non-obese
Body weight is tightly regulated and although the obese do eat more in comparison to the non-obese, the excess is less than expected.
Bariatric surgery is a cheat—all people need to do is eat less and do more
Saint and sinner?
Bariatric surgery in context

- Although dieting and exercise can be effective in reducing long-term weight, this only works in a select few.
- Bariatric surgery does not in itself cause weight loss.
- The surgical procedure is part of an integrated management plan designed to change behaviour.
- Success depends on the patient engagement.
Is there really a difference?
Bariatric surgery is part of an integrated programme of care designed to alter behaviour and achieve weight loss.
Bariatric surgical procedures are very high risk operations
Patients with morbid obesity have a very high incidence of co-morbidities
- Diabetes
- IHD
- Thrombogenic
- Depression

Obesity surgery is technically demanding:
- Anaesthesia
- Surgical resection and anastomoses
Operative mortality rates

- AAA Repair 5%
- Oesophagectomy 5%
- Colonic resection 3%
- CABG 1%
- Hip replacement 0.5%
- *Obesity surgery* 0.1%
Obesity surgery has one of the best peri-operative profiles of any major elective surgery.
Myth 5

Obesity surgery is simply a cosmetic procedure
Post-operative results

- Decreased in mortality rate
- Diabetes resolution in 70%
- Hyperlipidaemia improvement in 70%
- Hypertension resolution in 62%
- Improved quality of life
- Weight loss
Obesity surgery has significant prognostic and functional benefits
Obesity surgery has significant prognostic and functional benefits
Obesity surgery is not a long-term solution for obesity
Mortality differences increased over time
Weight loss persisted at 15 years
Prophylactic effect
- IHD
- Diabetes
- Cancer
Bariatric surgery has a primary preventive role, provides long-term weight loss and has significant prognostic benefit.
Obesity surgery is too expensive and will bankrupt the NHS
Economic argument

- Initial outlay of £10,000
- Less than 1% of eligible patients undergo surgery
- £7000 QUALY
- Moreover:
  - Avoidance of future costs
  - Cost–effective by 3.5 years
  - Impact on paid employment
Obesity surgery provides significant financial benefits to the NHS and society in general
Clinical practice in the UK

- Who gets bariatric surgery?
- What procedures are commonly done?
Who gets surgery

- NICE guidelines
  - BMI of 40
  - BMI of 35 with co-morbidities
- Patients should have failed conservative management for 12-24 months
- Patients should be managed within an MDT with input from physicians, psychologists, dieticians, anaesthetists and specialist surgeons
- Less than 1% eligible population in the UK receive bariatric surgery
Types of surgery

- Current procedures
  - Gastric band
  - Gastric bypass
  - Sleeve gastrectomy

- Rarer procedures
  - Duodenal switch
  - Gastric plication

- Endoscopic procedures
  - Balloon
  - POSE
  - EndobARRIER
Gastric band
Gastric band

- Good for large portion eaters

Advantages
- Very safe
- Reversible

Disadvantages
- Requirement for band maintenance and follow up
- Incidence of revision surgery
Gastric sleeve
Permanent restrictive procedure

Advantages
- Good weight loss profile
- Effective diabetic resolution

Disadvantages
- Higher operative risk as compared with band
- Irreversible
- Complications whilst rare are serious with very long recovery times
Gastric bypass

Roux-en-Y Gastric Bypass

- Esophagus
- Bypassed Portion of Stomach
- Proximal Pouch of Stomach
- “Short” Intestinal Roux Limb
- Pylorus
- Duodenum
Gastric bypass

- Good for snackers and patients with severe morbid obesity

- Advantages
  - Excellent weight loss profile
  - Effective diabetic resolution

- Disadvantages
  - Higher operative risk
  - Need for vitamin supplementation
If bariatric surgery is so good why are we seeing so much litigation?
The Patients

- Patient expectations
  - Young and potentially litigious group
- Patient knowledge
  - Support groups
  - Identity
- Rationing
  - Private patients
  - Long waiting lists
New branch of surgery
  - Close but subtly different to cancer surgery
- Relatively unregulated
- Perception of easy procedure
- Perception of large untapped private market
The Hospitals

- Large number of providers with minimal emergency cover
  - Private providers
  - Overseas centres
- Lack of specialist equipment
- Lack of trained staff (eg nurses, physio etc)
The Aftercare

- Different paradigm to traditional resectional surgery
- Most operations require life-long follow-up
- Complications can occur years after surgery
- Patients are physiologically “brittle”
Bariatric medico–legal research

- Systematic review
- Cotta et al (USA) and Bruguera et al (Spain)
  - 149 cases
  - 50% mortality rate
  - Malpractice in 25% of cases
- UK Experience (Reddy & Khan)
  - 25% mortality rate
  - Late complications in 60% of cases
  - Malpractice in 20% of cases
35 year old female with BMI of 47 referred for surgery
Laparoscopic gastric bypass
2 day hospital stay
Discharged with plan for outpatient review in 6 weeks
2 weeks later- presented as emergency in A&E at DGH with vomiting
Managed over the weekend and transferred to bariatric centre on Monday
Case presentation–1

- Admitted to bariatric centre- attempted conservative management- failed
- Laparoscopy to laparotomy and splenectomy
- Post-operative stay in ICU
- Gastro-cutaneous fistula
- 2 months period in ICU
- Peripheral nerve neuropathy following ICU stay
Issues

- Was the original operation satisfactory?
- Was there an inappropriate delay in transfer to the bariatric centre?
- Was the initial conservative treatment reasonable?
- Was the repeat operation appropriate?
- Were there failings in her ITU care?
But what about the GP.....

- Patient was seen 7 days following discharge with tachycardia and pyrexia
- GP under the impression she had a gastric band- treated conservatively
- Represented day 10 to GP- reassured
- No contact with the original team
- Delay was deemed to be material
Lessons to be learnt

- A duty of care is owed by all members of the medical team
- Ignorance or the rarity of an operation is not an excuse for errors
- Just because bariatric surgery is a specialised operation does not mean only specialists will manage it
Case presentation - 2

- 47 year old male with a BMI of 53
- Laparoscopic gastric bypass
- Complex case- injury to colon- sutured
- Did not settle- CT scan showed large volume of free fluid hence repeat laparoscopy was undertaken
- Relaparoscopy- colonic leak with needle noted within the abdomen
- Laparoscopy to laparotomy, distal colon resected- ileosotomy formed
- Slow recovery on ICU
Case presentation–2

- Referred on to the colorectal surgeons for management of stoma
- Readmitted after 6 months for reversal of ileostomy
- Pre-operative contrast study showed flow through the anastomosis
- Ileostomy reversed
- Leak post ileostomy reversal- repeat laparotomy performed- permanent end stoma performed
The needle was inappropriately left in-situ
The needle led to the colonic perforation or in the other event the colonic injury was in itself evidence of a breach of duty of care
Had this breach of duty not occurred then none of the sequelae would have occurred
Response

- Failure to remove the needle was a breach of duty of care.
- However, the colonic injury was not caused by the retained needle and was defensible.
- There was in fact a significant breach of duty of care by the colorectal surgeon.
- Material liability in this case rested with the colorectal and not the bariatric surgeon.
Choose your expert wisely

Ideal expert

- NHS and private practice in bariatric surgery
- Academic background and publication track record
- Legal knowledge (e.g., PGDip Law)
- Works in collaboration with a group of multidisciplinary medicolegal experts
There will be an increasing number of bariatric medico-legal claims in the next decade.

The compensation for successful cases will be high.

All medical professionals have a duty of care to these complex patients.

Choose your experts wisely!