The place of bariatric surgery in the new decade

Obesity markedly decreases life expectancy, especially among younger adults (Fontaine et al, 2003). There has never been an evidence-based report suggesting that surgery to induce weight loss (bariatric surgery) is bad for you. Indeed, evidence is growing that bariatric surgery in suitably selected patients reduces mortality (20–40%) as well as improving quality of life and associated co-morbidities, the metabolic syndrome in particular (Adams et al, 2007; Sjostrum et al, 2007; Greve and Rubino, 2008).

There will always be some people who will claim that morbid obesity is a self-imposed lifestyle disease which does not justify a surgical solution but this attitude significantly underplays the complexity of the aetiology of this life-threatening problem. The debate about whether surgically-induced weight loss is superior to any medical weight loss management programme for morbidly obese patients is over. Non-surgical weight reduction programmes for morbid obesity have a very high long-term failure rate and also rarely produce the weight loss that can be obtained by surgical means. This is not to say that advances in the molecular understanding of obesity may not eventually produce a useful therapeutic agent which would avoid surgery – we would all welcome this but the reality is it would much like expecting a magic pill to treat all cancers – we are still waiting for it!

The media has made bariatric surgery a lot more visible to potential patients over the last 10 years. Bariatric surgery in high profile patients who have shared their knowledge about the good outcomes has also helped to increase demand for this type of treatment. The minimal access revolution in surgery as well as improvements in surgical devices such as gastric bands has also contributed to the remarkable growth in bariatric surgery over the last decade. As with all complex surgery, sub-specialization and concentration of procedures in high volume centres has been responsible for the considerable reduction in perioperative morbidity and mortality (Nguyen et al, 2004). Setting standards for bariatric units in terms of the multidisciplinary team, surgeon training and continuing education are key tasks for any bariatric surgery society such as the British Obesity and Metabolic Surgery Society.

The dreaded R word

One perennial issue is how to provide an adequate service to the NHS when funding is restricted and bariatric surgery can only be delivered currently to around 2–3% of eligible patients. It is tantamount to gross corporate neglect to not allow this form of treatment to be available to all eligible patients in a socialized health-care system. Rationing, often on an irrational basis, is usually the norm and provides a major challenge to overcome. Although there is some evidence that bariatric surgery saves money for the health-care system more evidence is needed to convince commissioners that this is the case (Cremieux et al, 2008; Greenberg and Robinson, 2009).

Which procedure is best?

Much of the debate around bariatric surgery now is not whether it should be done but who to do it on and what type of procedure to do. Traditional National Institutes of Health and National Institute for Health and Clinical Excellence (2006) criteria are universally agreed as reasonable standards to be adhered to but there is emerging evidence that they need to be revised to consider lowering the body mass index threshold, especially in diabetic patients (Rubino et al, 2009). There is a real need for research to examine the current eligibility guidelines which are likely to be completely re-written in the next decade to be more sensitive to various co-morbidities rather than weight loss per se.

The selection of the correct bariatric procedure for an individual patient still remains a matter of opinion but there has been some emerging evidence favouring more one procedure over another for certain types of patients. For example, gastric bypass has a profound effect on the speed of resolution of diabetes and might well be more effective in severely diabetic patients than other procedures, albeit at a 0.5% perioperative mortality risk (Buchwald et al, 2009). Gastric banding currently provides around 50% of the bariatric activity in the UK and is rapidly growing in other countries, especially the USA where it is relatively new. It is certainly the lowest perioperative mortality risk bariatric procedure available (around 0.05%) and in suitably selected patients where the aggressive follow up can be maintained will have much better results than any form of medical treatment, especially in diabetic patients (Dixon et al, 2008). Experience is rapidly growing with the newer option of sleeve gastrectomy which also has to find its place among the various procedures available for patients. It is unlikely that 'one size will fit all', therefore any card-carrying bariatric surgeon needs to be able to perform a variety of surgical procedures.

Some of the debate has now turned to new emerging techniques and technologies – evaluating their effectiveness and place in the bariatric market. Gastric stimulation is still under evaluation. Endoscopic methods of creating a gastric restrictive procedure look promising in the short term and are undergoing long-term assessment (Deviere et al, 2008). Single incision and transvaginal bariatric surgery is also undergoing evaluation and will eventually find a place. Clearly if good results can be obtained by less invasive means then they will likely be adopted after suitable clinical experience on their efficacy has been proven. It may well be that those patients deemed at very high operative risk (extreme body mass index, history of deep vein thrombosis, sleep apnoea) or who are very risk averse would be better off having one of the newer techniques even though they might well not be as effective as more invasive techniques (Longitudinal Assessment of Bariatric Surgery (LABS) Consortium, 2009).

Target organ surgery is never without problems and along with all the above developments there will be an increasing industry in revisional surgery. Revisional options have to be worked out to be safe and effective. All bariatric surgeons will have failures as a result of either patient factors or carrying out an inappropriate bariatric procedure. This underlines the necessity of having a multidisciplinary team who have a thorough training and understanding of obesity nutrition and psychology, and a committed interest to evaluating surgical techniques. Their bariatric centre data should also be submitted for external audit to a national database such as the UK National Bariatric Surgery Register.

Conclusions

Bariatric surgery is the fastest growing area of gastrointestinal surgery and is intensely satisfying from the multidisciplinary team's point of view as most patients are very happy with their outcomes. Because the disease process has not been directly treated this increases the importance of multidisciplinary team evaluation to provide treatment of underlying medical and psychological issues which often run in parallel. Patients constantly need reminding that they still have to use considerable self-discipline if they are to maintain the good results of their early years after the surgery has been carried out. Lifelong follow up of these patients in the community has to be mainstreamed into general practice as it not possible to maintain permanent follow up of all patients in a tertiary care bariatric centre. There is still much work to be done to educate GPs who are often unaware of the advances in bariatric surgery so that they can refer suitable patients to the local bariatric surgery centre. Furthermore, general surgeons undertaking acute surgical care take need to understand the complications that occasionally these patients develop so that they can be managed in a timely manner. BJHM

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KEY POINTS

- Bariatric surgery is the most effective weight reduction treatment for morbidly obese patients.
- Bariatric surgery rationing criteria need reviewing.
- Bariatric surgery can be very safe in appropriately accredited bariatric centres.
- The effects of bariatric surgery on the metabolic syndrome are very impressive.

Appointment of a new Editor-in-Chief for *BJHM*

We are delighted to announce that Professor Rob Miller, who was Medical Editor of *BJHM* from 1991–2000, has agreed to re-join the journal as Editor-in Chief.

Professor Miller is Reader in Clinical Infection at University College London, Honorary Professor at the London School of Hygiene and Tropical Medicine, and Honorary Consultant at Camden Provider Services NHS Trust and University College London Hospitals NHS Trust.

Professor Miller qualified from St Georges Hospital Medical School and trained in general medicine, intensive care and respiratory medicine, and in 1987 was appointed Senior Lecturer in Medicine and Genitourinary Medicine at University College London. Clinically, he works on T8 the infectious diseases/Tropical Medicine/HIV inpatient unit at UCL Hospitals where he also provides a specialist outpatient HIV/TB service. His research interests relate to the respiratory complications of HIV infection, particularly *Pneumocystis jirovecii* pneumonia and tuberculosis.

Professor Miller is Royal College of Physicians tutor and Training Programme Director for CMT for Camden Provider Services PCT. He is the author of over 250 peer-reviewed journal articles, 53 reviews and 35 book chapters, and has co-edited three books on HIV infection.

Professor Miller was previously Medical Editor of *BJHM* and for 6 years, until 2009, was Co-Editor of *Sexually Transmitted Infections*.