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The bariatric physician

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ABSTRACT

Obesity is a rapidly increasing problem that has wide implications for the National Health Service. At present, obesity is not being addressed in a joined-up and standardised manner. This has downstream effects for the health service, the economy and society as a whole. As highlighted by a recent RCP report, there is a need for a new class of dedicated specialists who can evaluate individuals with health problems that are related to obesity, direct their care in a coordinated fashion, act as an advocate for their needs and be able to liaise with multiple different services to improve the provision of patient care. In this article, we discuss the role of this specialist - the bariatric physician.

KEYWORDS: Obesity, bariatric physician, weight management, health policy, bariatric surgery

Introduction

Obesity is a rapidly growing worldwide epidemic and a major public health concern. It is associated with serious medical, psychological and social consequences. The metabolic consequences of obesity are driven by visceral adiposity. Although not the best measure of adiposity, the body mass index (BMI) is generally employed to determine overweight and obesity. Obesity is defined as BMI ≥30 kg/m^2 (a lower cut-point of 27.5 kg/m^2 is recommended for South Asians). The prevalence of obesity in UK adults is around 25%, second only to that in the United States.[1] Of great concern, obesity is present in 17% of girls and 20% of boys aged 10–11 years.[2] Available data suggest that at least half of these children will become obese adults. The Foresight group predicted that by 2050, one in two UK adults will be obese.[3] The increasing prevalence of obesity is also a major economic burden. The total cost of obesity in the UK was estimated at £7billion/year in 2002, doubling by 2014, and is estimated to rise to £50 billion/year by 2050.[4]

The degree of obesity determines an individual's risk for morbidity and mortality. Thus, obesity is subdivided into several classes (Table 1). Importantly, the prevalence of the more extreme forms of obesity (BMI ≥40 kg/m^2) is rising at a greater rate than lower levels of obesity.[5] Medical problems affecting those with extreme and complex obesity are the greatest challenge. It has been estimated that about 800,000 individuals in the UK have either a BMI of ≥35 kg/m^2 with a co-morbidity such as diabetes or a BMI of ≥40 kg/m^2 without a co-morbidity. In accordance with NICE and international guidance, these people can be considered for bariatric surgery.

All healthcare professionals are presented with patients whose obesity is the progenitor of disease. The current method to managing such patients is to focus on the disease itself rather than aiming to treat the patient holistically by addressing the underlying problem of obesity. Also, there is a lack of a multi-professional approach for assessing and treating patients with obesity. Obese patients often have complex medical, psychological and social needs. The lack of coordinated care for patients with extreme and complex obesity is hampered by inadequate formal training and experience in the management of this patient group. Therefore, there is an increased need for physicians specialising in obesity (bariatric physicians), working within a multi-professional team, to manage patients with extreme and complex obesity and this has been the focus of a recent RCP report (Box 1).[6]

The role of the bariatric physician

The bariatric physician is the clinical leader who can act as the local champion for the care of the obese patient, and who leads the multidisciplinary team. Obese patients need help, and is it well recognised that traditional weight loss programmes fail to achieve significant or long-term, sustained weight loss in this group. The impact that excessive body mass has on the health of obese patients often means that they have an urgent need for treatment for their condition. It is important to understand this impact – is obesity causing disease or disability? This assessment helps to both stratify the patient's risk and highlight the pressing need for more definitive forms of treatment (Box 2).

It is the goal of the bariatric physician to identify the health impact of obesity on the patient holistically and to coordinate therapeutic measures to reduce the associated problems at the same time as addressing the underlying cause, whether using pharmaceutical, lifestyle and dietary, psycho-social or surgical means. Navigating a path through the semi-mystical process of obtaining funding for bariatric intervention is also a key skill, despite the fact that the economic argument for surgery has already been debated at length and won in terms of long-term cost savings.[7] We hope that the advent of central specialised commissioning will make the process easier. The bariatric

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Table 1. Classification of weight by body mass index.

BMI range (kg/m^2)	Classification
18.5–25	Normal range
25–30	Overweight
>30	Obese
30–35	Grade I obesity
35–40	Grade II obesity
>40	Grade III obesity (morbid obesity)

BMI = body mass index.

Box 1. Recommendations of the RCP report on obesity.[6]

- Commissioning of specialist obesity services; a multidisciplinary approach to 'severe and complex obesity'
- Enhancement of both undergraduate and postgraduate medical education in obesity and nutrition
- Development of a patient charter for individuals with obesity
- Specialist training to develop the skills of dedicated bariatric nurses
- An obesity champion in every hospital trust to improve obesity services and to liaise with primary care with regard to prevention and intervention strategies
- The training of bariatric physicians within a supervised training programme who have specialist experience of bariatric medicine

RCP = Royal College of Physicians.

Box 2. Approach to the patient with obesity.

1 General assessment
   - Full clinical history and examination
   - Identification of potential causes of secondary obesity
   - Identification of previously unidentified co-morbidities
   - Review of medications that could exacerbate obesity
   - Lifestyle history including previous attempts at weight loss, current efforts including diet and physical activity
   - Psychological evaluation and readiness to change
   - Family and social circumstances

   The bariatric physician might employ validated questionnaires to assess some of these aspects.
2 Investigations to assess co-morbidities, such as sleep studies for those with suspected obstructive sleep apnoea.
3 Patient education, which allows the patient to understand the factors that contribute to obesity. A motivational-interviewing physician–patient partnership is commonly employed.
4 Selection of appropriate dietary intervention in collaboration with a specialist dietician.
5 Pharmacotherapy for obesity, including assessment of risks and benefits. The pancreatic lipase inhibitor, orlistat, is currently the only licensed drug for obesity, but there are several other compounds, working through various mechanisms (central and peripheral), that are undergoing evaluation. Replacement of current medications by more weight-friendly alternatives is a key task.
6 For patients undergoing preparation for bariatric surgery, the bariatric physician will ensure appropriate assessment, investigation and preparation, working in collaboration with surgical colleagues and other members of the multi-disciplinary team.

physician should also be involved in the commissioning of obesity services, as well as in auditing their performance.

The care of the obese patient in hospital setting should also be deliberated, taking into account considerations such as the size of the chairs in outpatient clinics, the capacity of the scanners in radiology, or the maximum weight of the beds, operating tables and hoists for inpatients. Those with a BMI greater than 35 have longer lengths of stay and more complications while in acute hospitals or undergoing routine surgery. Having a specialist who can concentrate on managing the specific needs of obese patients should save hospitals (and the NHS) a huge amount of money. A local obesity champion is needed to highlight these issues and the bariatric physician could fulfil this role. And although not the primary responsibility of the bariatric physician, there needs to be a voice (from the speciality as a whole) to promote the prevention of obesity through legislation and working with the food and drinks industries and government to promote healthy living.

Obesity staging criteria

A BMI that falls into an obese classification does not always reflect the extent of an individual's medical problems. There is a recognised group of people who are metabolically healthy despite their obesity. It is therefore important to define individual risk and impact of obesity. This allows management to be tailored to those whose obesity has the greatest impact on their health and towards obesity complications that are likely to respond to therapy. Increasingly the term 'severe and complex obesity' is being used in addition to the traditional BMI classification.

There are several systems for 'staging' how far obesity has impacted the individual. The Edmonton staging system has been validated against mortality in a large population. Other systems include the King's staging criteria and the DUBASCO score.[8,9] Staging systems are useful in tailoring treatments to down-stage the severity of a patient's obesity effectively across a number of different domains, taking into account

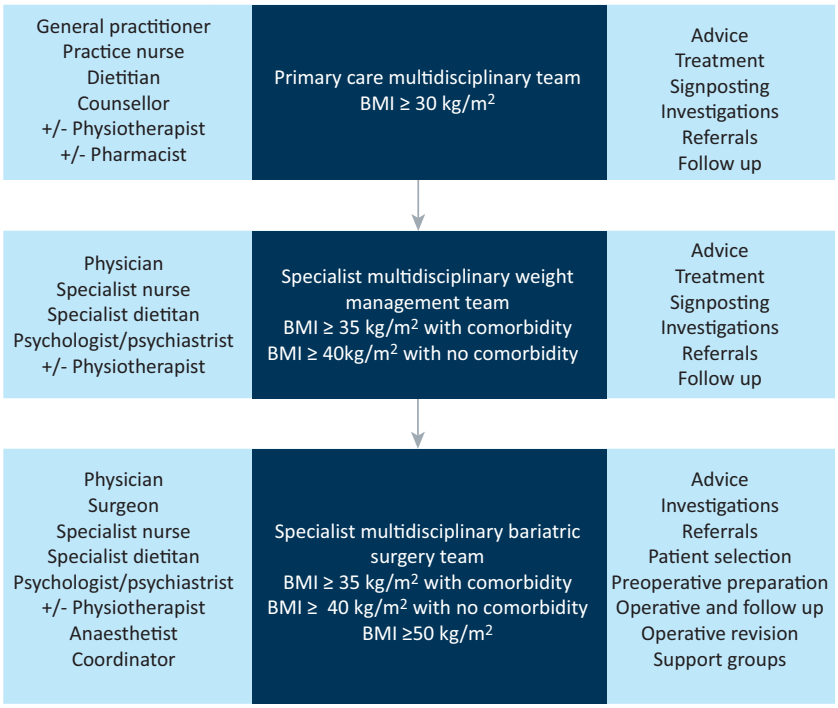

Fig 1. Multidisciplinary teams across levels of care.[6] BMI = body mass index

everything from physical, to functional and psycho-social effects. The staging systems are not, however, always useful for determining eligibility for bariatric surgery.[10]

Such assessments need to be performed in a non-judgemental, multi-disciplinary team setting. It should be emphasised that the staging criteria do not stratify overall risk, but instead represent a useful mechanism for systematic and evidence-based individual assessment. Hence, management of the obese individual is tailored to the stage of the condition and can range from watchful waiting to active intervention and, sadly, to palliation.

Bariatric service development

A multidisciplinary approach to the care of patients with obesity is necessary across all levels of care. Currently, specialist weight-management services are referred to as Tier 3 and Tier 4 services. Arguably, the division into various tiers is arbitrary and the services should work together as a continuum of specialist care. Full service specifications for these services are currently under development.

With the increasing prevalence of extreme obesity (BMI >40 kg/m^2), and the clinical and perceived cost-effectiveness of bariatric surgery, there is a growing need for surgical intervention. It has been demonstrated that bariatric surgery occurs much more safely at high-volume centres that are supported by a multidisciplinary team (Tier 4 service). It is important to have appropriately trained physicians, surgeons, dieticians, nurses and psychologists.[11] But the most important thing is that these healthcare professionals work together as a team to provide the best care to the obese patient (Fig 1).

The presence of a multidisciplinary medical weight-management clinic with a physician who has an interest in obesity management, along with a dietician and a psychologist, is the ideal background for developing a bariatric surgery service. There are also several successful surgically-led services that work efficiently within a multidisciplinary team. Given the chronicity of obesity and its co-morbidities, the long-term medical management of patients with extreme and complex obesity, led by a specialist physician and multi-disciplinary team, is essential. In developing successful specialist weight-management and bariatric surgery services, support from the Acute Trust is vital, as is early dialogue with local commissioners. Another important aspect of developing a service is the ability to maintain a database and to audit outcomes in comparison with the national standard.

Training the next generation

There is currently an unfilled need to train people in obesity management. Training needs to start in medical schools and the foundation years, and to continue throughout core medical training. Including obesity in the training curricula is an important first step, but generally raising awareness about obesity management both among trainees and in the current consultant body through continuing medical education is important. Given the huge prevalence of obesity in those in hospital and in the community, there is a need to develop a separate speciality to train the bariatric physicians, similar to the development of the acute medicine and geriatric medicine specialities. This would, however, probably take several years to develop and even longer before the first trainees completed their training. In the meantime, obesity management should

be part of general medical training while specific aspects could be incorporated into other training programs. A one-year post CCT fellowship, for example, could be developed under the auspices of the RCP, and Diabetes and Endocrinology is perhaps the programme most suitable for this.

Nevertheless, various other specialists may wish to undertake training in bariatric medicine, including respiratory physicians with an interest in sleep apnoea, hepatologists with an interest in fatty liver disease or chemical pathologists and metabolic physicians. In addition to the clinical component, such training fellowships should prepare the trainee to become a clinical leader and a potential local obesity champion, because opportunities for service expansion, dialogue with commissioners and regular multidisciplinary meetings are important. Given the wide-ranging effects of obesity, similar training initiatives should be implemented by the other royal colleges.

Conclusions

Obesity is a 'wicked' problem. It is going to drive a significant number of diseases that will stretch the NHS at a time of financial constraint. Although every effort should be made to stem the rising prevalence of obesity, there is a need for the specialist multidisciplinary care of patients whose obesity is at the core of multiple serious medical problems. To effectively treat these patients, there is a need to develop bariatric medicine in a distinct manner, as has occurred in other countries. Efforts through the RCP, the Association of Physicians for the Study of Obesity (APSO-UK), and other specialist organisations are underway to ensure progress in this emerging and much-needed discipline. Indeed the International Association for the Study of Obesity (IASO) Specialist Certification of Obesity Professional Education (SCOPE) qualification is open to all healthcare professionals (www.iaso.org/scope/).

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