5th National Diabesity Forum Conference: Pulling together for an improved outlook on diabesity

This conference, which took place on 2 July 2013 at the Renaissance Hotel in Manchester, aimed to take a unified and practical approach to the joint management of coexistent diabetes and obesity. Talks covered topics such as how well obesity was being managed in the NHS and a case study of good service provision that focused on a specialist weight management service in Mid-Yorkshire. Delegates were given the chance to discuss complex case studies which revealed the importance of individualised care pathways and they considered the debate surrounding the use of bariatric surgery for people with obesity. There were also sessions on physical activity, optimising drug regimens and dealing with complications of diabesity such as sleep apnoea, sexual dysfunction and foot ulcers.

Chinnadorai Rajeswaran, Chair of the National Diabesity Forum, welcomed delegates to the 5th NDF Conference.

Obesity: How well is it managed in the NHS, and can it be improved?

Julian Barth, Consultant in Chemical Pathology and Metabolic Medicine, Leeds

Dr Julian Barth began the conference with a presentation on the management of obesity in the NHS in the light of changes to the service. He talked about the regional differences in obesity management provision suggesting that some areas were providing more comprehensive care than others. He suggested that improvements in multidisciplinary training for all healthcare professionals would address this shortfall and that structural changes to the NHS may actually help to improve obesity services.

Care provision in diabesity: What does a good service look like and what benefits will it deliver?

Kurt Maloney, Specialist Weight Management Dietitian; Mohan Ramasamy, Specialist Weight Management Physiotherapist, both at Mid Yorkshire Hospitals NHS Trust

In the first part of this session Kurt Maloney described the development of a specialist weight management service in Mid-Yorkshire. The service was established for people aged over 16 with a BMI ≥30 kg/m^2 and involved a 12-week group programme (or a 6-week accelerated group programme) with a dietitian and physiotherapist, or one-to-one dietitian appointments with no physiotherapy. There was also a specialist MDT service for those ≥40 kg/m^2 or ≥35 kg/m^2 with comorbidities, which had a consultant, specialist dietitian, specialist physiotherapist and clinical psychologist. The MDT group programme aimed to normalise erratic eating habits and improve diet quality using cognitive restructuring, trigger management and psychological input. An evaluation of the specialist MDT group programme using outcome measures for weight loss and retention found 159 patients participated in 2012 of whom 89.5% completed the programme, with 36% achieving 5% weight loss and 81.4% a 3–5% weight loss.

The service is evaluating the psychological outcomes of the specialist MDT programme by questionnaire. Preliminary results show significant improvements in symptoms of depression, restraint, dichotomous thinking, weight change efficacy and disinhibition.

The second half was given by Mohan Ramasamy who talked about the outcomes of the physiotherapy given during the programme. The patients were assessed and prescribed an appropriate exercise strategy that would help with weight loss with realistic goals.

Results were gauged by using the modified 2-minute step test or 6-minute walking test. There were significant improvements in both tests among 23 patients post intervention. The patients' aerobic ability improved, as did their ability to keep to an exercise routine and maintain activity.

Adopting an individualised patient-driven pathway of care: Why one size does not fit all

Lucinda Summers, Consultant in Endocrinology and Honorary Senior Lecturer, Salford

Lucinda Summers talked about the different treatments for obesity – lifestyle modification, psychological support, drug therapy and bariatric surgery – showing how each type of therapy could be successful when directed to the right patient.

She then introduced six case studies of people with varying levels of obesity and other comorbidities, and some with complex medical, psychological and social problems. There was an open discussion and debate of treatment options, discussing the cases in detail and showing in graph form the impact of different combinations of therapy on the patients' weight. The message was that individualised pathways need to be developed for each patient. Drug therapies are not suitable for some patients and bariatric surgery may be more suitable for others. Cognitive behavioural therapy and psychological support can have a massive impact on weight loss for some patients and often patients will need a combination of these therapies that varies over time.

The role of physical activity in managing diabesity: Understanding what can be achieved

Tom Yates, Senior Researcher, Leicester

After lunch and the sponsored symposium Tom Yates kicked off session two with a talk about the role of physical activity in managing diabesity. He began by looking at diabesity and the interplay between genes and lifestyle with 80–90% of all cases of type 2 diabetes being linked to an unhealthy lifestyle and obesity.

Physical inactivity is the fourth leading cause of premature mortality and is one of the leading modifiable risk factors. It is responsible for more deaths than tobacco smoking and

it is linked to a higher risk of type 2 diabetes. Increased levels of walking can lower the risk of both diabetes and cardiovascular disease. To encourage people at risk of diabesity to engage in physical activity and increase their levels of exercise it is necessary to assess current levels, find out preferences, find motivations and consider making a patient contract. It is important to tailor advice to your patient. Goal setting can include giving the patient a pedometer and a steps level for each day.

The Walking Away from Type 2 Diabetes structured education programme involves a 3-hour introduction that covers the patient's story, the patient's health and risk factors, discussion about diet and an introduction of a physical activity programme, including an action plan and diaries, and visual resources showing recommended levels of activity to reduce the risk of diabetes. The programme has been successful in increasing physical activity among participants, improving glucose control up to 24 months after implementation and also making a 61% reduction of the relative risk of developing diabetes.

Optimising drug regimens: Past, present and future

Cliff Bailey, Professor of Clinical Science, Aston University, Birmingham

Cliff Bailey gave a potted history of drug therapies used for type 2 diabetes and obesity, and discussed the options that are now available and what therapies we can hope to see in the future.

A complicating factor of using drugs to manage diabetes is the tendency for improved insulin action or increased insulin concentrations to cause weight gain. There are several new approaches that do not cause weight gain, such as glucagon-like peptide-1 (GLP-1) receptor agonists and dipeptidyl peptidase-4 (DPP-4) inhibitors (gliptins). Selective inhibitors of sodium-glucose co-transporter-2 (SGLT2) reduce renal glucose reabsorption and offer a new approach to reduce hyperglycaemia by eliminating excess glucose in the urine, which also facilitates weight loss. Other approaches, such as tissue-specific inhibitors of glucocorticoid action, and analogues of weight-lowering and glucose-lowering hormones from the intestine and adipose tissue, are advancing in development.

Debate session

Surgical intervention: Pros and cons

Roger Ackroyd, Consultant General Surgeon, Sheffield; Chinnadorai Rajeswaran, Consultant Physician and Chair, National Diabesity Forum

Roger Ackroyd began the debate by outlining the surgical options for obesity. He explained that it is important to ensure that the patient is suited to the surgical option. Selecting the correct patient is simple if using the black and white NICE criteria, but the patient should be able to commit to lifelong follow up and be able to understand the implications of surgery.

The correct surgery should then be chosen. In Sheffield, 1502 laparascopic gastric bypasses were given between 2004 and 2013: 36% had type 2 diabetes of whom 96% had improved or "cured" after the surgery. A band might be better for younger patients with a BMI <49 who do not have diabetes. Bypass may be better for those with type 2 diabetes who are super-obese.

The best options for those with diabetes are bypass (resulting in 95% resolution of diabetes), biliopancreatic diversion (99%) and duodenal switch (100%). Banding results in about 50% resolution and sleeve 50–60%. The speaker presented an algorithm to work out which type of surgery is best for the patient. All bariatric surgery requires life-long follow-up.

Looking at the alternative view was Chinnadorai Rajeswaran who posed the question, is surgery the panacea for obesity? He presented obesity as a complex interplay of physical and psychological factors being caused by genetic conditions, neurological and endocrine disorders and syndrome, as well as psychological and drug-induced obesity.

He talked about the development of therapies for diabetes, such as orlistat and gliptins, and Vbloc therapy that targets overeating by limiting food intake by reducing gastric expansion and delaying gastric emptying, so that there is a longer feeling of fullness.

The speaker pointed out that pharmacology and bariatric surgery both carry risks. Surgery will often have complications including bleeding, leakage, ulcers and failure to lose weight, and patients will often need to take multiple supplements after surgery. He listed 25 metabolic complications of bariatric surgery, including vitamin deficiencies, anaemia, folic acid deficiency, nocturnal diarrhoea and bacterial overgrowth.

The speaker concluded that although bariatric surgery can be life-saving for the right patient, attention to nutrition and vitamin supplementation is key, and lifelong monitoring is essential. Calorie restriction is still necessary after surgery. He wondered whether it is best to stick with the devil we know rather than use therapies that may have extensive complications.

Creating appropriate care plans for managing diabetes-related complications in obesity: The role of the extended team

Jane DeVille-Almond, Independent Nurse Consultant and Chair, British Obesity Society, Wolverhampton

For the last session of the conference, Jane DeVille-Almond looked at care pathways and their use in preventing and managing the clinical risk of developing complications of diabetes. A standard pathway for obesity involves weight management interventions, increased physical activity, improved diet and eating behaviour, reduced energy intake and improved emotional well-being. She focused on three conditions related to obesity and ways to reduce the effects or the risk: foot ulcers, sleep apnoea and sexual dysfunction.

Good advice must be given about foot care and it must be remembered that there may be physical restrictions on larger people if they are unable to bend to reach their feet. A referral to a foot specialist should be considered.

Sexual dysfunction has to be approached tactfully and direct questioning may need to be avoided. Obesity can cause sexual dysfunction because of mobility issues, poor body image, psychological issues, diabetes, hypertension and cardiovascular disease.

Obstructive sleep apnoea (OSA) is caused by a block in the airway creating pauses in breathing. It can be a risk factor for hypertension and is connected to type 2 diabetes. More than 60% of white men with type 2 diabetes have OSA. Patients with OSA need to monitor their apnoea and may need referral to a sleep centre. ■