

MANAGING OBESITY

Two interesting case reports appeared in the *Medical Journal of Australia* recently, both dealing with the management of obesity. The first is of an overweight 13-year-old girl who went to her GP with an upper respiratory tract infection. Her mother remarked that the girl was worried about her weight and was being teased at school. She was sedentary, with no interests that included physical activity. Several members of her family were obese, but there was no family history of disorders associated with insulin resistance. The girl's weight was 72.6 kg and her height 161.5 cm, giving her a body mass index of 28 kg/m², which is in the adult overweight range. Her waist circumference was 85 cm, putting her into the adult 'at risk of metabolic complications' range. She was in mid-puberty and blood pressure was 120/80 mmHg.

The GP saw the girl and her mother together and separately, initially every 3 weeks and then less often. Two visits to a dietician were arranged. The girl was encouraged to set her own goals for food and activity changes. Over time, the mother herself started to lose weight as she altered her cooking practices and became more active. Meal patterns changed — water rather than soft drinks were offered, meal portions were reduced, vegetables and fruit were increased and high-calorie snacks were no longer kept in the house. The girl started to eat breakfast daily and walk to and from school. She also took up regular exercise in the form of tennis and tap dancing. Ten months later, the girl's weight was 69.3 kg and her BMI was 26.1 kg/m², and waist circumference 80 cm. She was much happier at school and felt that she was more part of the community.

The second report is that of a 42-year-old woman who was referred for management of severe obesity and type 2 diabetes. She had started to gain weight after the birth of her first child, 20 years earlier and had attempted weight loss several times, but always regained any weight lost. Her diabetes was treated with metformin (1 000 mg twice daily) and glibenclamide (5 mg once daily). She also had a history of hypercholesterolaemia and hypertension, treated with atorvastatin (40 mg in the morning) and ramipril (2.5 mg in the morning). She had a maternal history of obesity and type 2 diabetes, was married with two children and a full-time university student. Her weight was 114.5 kg, height 1.65 m, BMI 42.1 kg/m² and waist circumference 125 cm. Her glycosylated haemoglobin was high at 10.2%. All other investigations were normal.

The patient was keen to lose weight, and had insight into the contribution of obesity to her other pathology. A diet and exercise regimen was discussed and she was referred to a dietician for help in putting together a 2 500 kJ deficit diet. One month later, the patient reported that she was struggling to combine full-time study, part-time work and maintaining a household and an exercise regimen. Changing her diet was difficult and she was still snacking. Her diabetes control had not improved. Her doctors decided that more aggressive management of her weight was indicated because of her comorbidities, and gastric banding was discussed. However, without private medical insurance, the waiting list at the few public hospitals that performed the operation was up to 5 years. Medical treatment was again discussed and she started a 3-month course of a very low-energy diet (VLED), comprising a sachet of essential nutrients mixed with water 3 times a day. This provided vitamins, minerals, amino acids, essential fatty acids and 1 914 kJ per day. A bowl of vegetables or salad, sprinkled with a teaspoon of olive oil was eaten in the evenings. She stopped the glibenclamide because of the risk of hypoglycaemia and to allow insulin levels to fall, producing a mild ketosis to control hunger. She saw a dietician every 2 weeks, and serum electrolytes, urea, creatinine and uric acid levels were measured 6 weeks into the diet.

After 3 months she had lost 17 kg and blood glucose levels had improved dramatically. She was advised to phase out the VLED over the next 2 months and to adopt a low-fat, low-carbohydrate diet. Because previous weight had always been regained, sibutramine, 10 mg in the mornings, was also prescribed. Not surprisingly, the patient reported that although she was no longer struggling with hunger, the cost of this regimen was becoming a problem.

These 2 cases are illustrative of the problems associated with the management of obesity, and graphically show the benefits of a complete change in lifestyle against the medical management of the condition. There is no information on the status of the woman in the second case report but the chances of anyone not regaining weight once they have come off a regimen as strict as the VLED are slim, particularly if there is no change in physical activity. It would perhaps be fair to say that her doctors may have better improved her long-term outlook by helping the woman find ways of changing her diet and lifestyle, rather than relying on a medical model for weight management.

Bridget Farham