Anodipsia nervosa a variant of anorexia in patients with end-stage renal disease

Sir,
Anorexia nervosa is an eating disorder first described over 100 years ago by Gull [1]. The main features are a body mass index (BMI) less than 17.5, a disturbed body image, amenorrhoea, and an intense desire to be thin. Although the use of laxatives and diuretics is well recognized [2], the primary method of weight reduction is through anorexia and bulimia. We describe the case of a 44-year-old female haemodialysis patient with a previous history of anorexia nervosa who, following transplantation, developed obsessional delusions associated with fluid intake, a condition which we have called ‘anodipsia nervosa’.

Case. Our patient first presented to the renal unit in 1982 aged 22 years with primary hyperparathyroidism and chronic renal failure. She underwent parathyroidectomy and over the following 5 years her renal function deteriorated progressively. In 1987 she complained of lower back pain and a space-occupying lesion in the lower pole of her right kidney was detected. Renal biopsy was performed and showed a renal adenocarcinoma. Subsequently, she underwent right nephrectomy. In 1988 concern was expressed by various members of staff attached to the renal unit about the patient’s dietary habits, at that time she weighed 38 kg (BMI 14.8) although this did not concern her. She was referred to a psychiatrist who she saw once. In 1989 she received a live related transplant from her father, which was rapidly and irreversibly rejected. In 1992 she was referred to another psychiatrist specializing in eating disorders and a diagnosis of anorexia nervosa was made. A series of psychiatric consultations revealed a history of an eating disorder dating back to the age of 18 years. With appropriate supportive treatment her weight increased to 46.2 kg (BMI 18.0) and remained stable. In July 1996 she received a successful cadaver renal transplant that was complicated in the first post-operative week by severe fluid retention as evidenced by gross oedema to the mid-thigh level. This improved with increasing graft function and she was discharged 3 weeks later with a plasma creatinine of 133 μmol/l. However, she then became obsessed with her fluid status and weight. She would not increase her fluid intake above 1 litre per day for fear of developing oedema and voiced a desire to return to haemodialysis where there was ‘greater control of her fluid status’. She was re-admitted, and with dietetic and psychiatric input a target fluid intake of 2 litres per day was set and achieved without the development of oedema. Subsequently, the graft was lost to chronic rejection in October 1998 and she returned to haemodialysis.

Comment. Both anorexia nervosa and chronic renal failure in females aged 20–44 years are rare conditions. Fombonne, in 1995 [3], quotes a prevalence for anorexia nervosa of 1300 million and the USRDS gives a point prevalence figure for end-stage renal disease of 648 million in patients aged 20–44 years [4]. This would give a point prevalence of 0.8 million population for the two conditions occurring together, assuming no interaction. This would explain why we can find no previous reports of anorexia nervosa and end-stage renal disease. In this lady anorexia nervosa, once recognized and appropriately treated, remained stable. Following transplantation, the development of oedema was associated with loss of control of her body image. This was regained by irrational, self-induced fluid restriction. Although abuse of diuretics and fluid retention is recognized in patients with anorexia nervosa, we are unaware of any other reports where fluid intake has become the predominant feature of the condition. We believe that in patients with anorexia and end-stage renal disease, transplantation may cause a recurrence of the ‘eating’ disorder related to change in body image, either steroid-induced or associated with fluid retention. Close liaison with dietetic

and psychiatric colleagues is necessary to manage such patients.

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