Distal gastric bypass surgery for the treatment of hypothalamic obesity after childhood craniopharyngioma

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CONTEXT: Obesity resulting from damage to the hypothalamus, i.e. hypothalamic obesity, is a severe condition that currently lacks any effective evidence-based therapy. OBJECTIVE: Our goal was to describe the course of hypothalamic obesity in a craniopharyngioma patient treated with distal gastric bypass surgery and to outline distinct aspects of multidisciplinary case management. PATIENT AND METHODS: A 29-year-old man, who had undergone craniopharyngioma resection at the age of 8, was referred to our Interdisciplinary Obesity Centre with a body mass index (BMI) of 52.0 kg/m(2), type 2 diabetes and obstructive sleep apnoea syndrome (OSAS). After careful preoperative preparation, including the adjustment of hormone substitution therapy for panhypopituitarism, nutritional counselling and a supervised exercise program, he underwent a distal gastric bypass operation. RESULTS: Eighteen months after the operation the patient's BMI had decreased to 31.9 kg/m(2), type 2 diabetes was in complete remission, and OSAS appeared to be improved. Also, feelings of hunger were markedly reduced after the operation. A standard regimen of supplements successfully prevented any severe nutritional deficiencies. After weight loss, the dose of hydrocortisone could be distinctly reduced without any signs of adrenal insufficiency while GH substitution had to be markedly increased to achieve normal IGF1 levels. CONCLUSIONS: Our case demonstrates that within a multidisciplinary team approach, a distal gastric bypass operation can be a safe and highly effective therapy for patients with hypothalamic obesity. Also, our findings hint at an effect of gastric bypass surgery on hunger and eating behaviour that may not essentially rely on hypothalamic mechanisms.