Thyrotoxicosis presenting as dysphagia
A case report

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Summary

Thyrotoxicosis may manifest with dysphagia. The case of an elderly male with dysphagia as the initial symptom is discussed. It is suggested that thyrotoxicosis be included in the differential diagnosis of dysphagia in the elderly, particularly if muscle weakness is also present.

Dysphagia is a relatively common symptom in the elderly patient but there is little evidence to indicate that it is associated with ageing. The presence of this symptom should therefore prompt further investigation. Thyrototoxic myopathy is one of the less common causes of dysphagia and may present diagnostic difficulty in the elderly, particularly when dysphagia is the presenting symptom. The following is a report of such a patient.

Case report

A 65-year-old man presented with dysphagia for liquids and solids of 4 weeks' duration. In addition, he had a 3-month history of marked weight loss and weakness. He was very emaciated (Fig. 1) with generalized muscle weakness and mild congestive cardiac failure. The clinical diagnosis was carcinoma of the oesophagus with nutritional cachexia and cardiomyopathy.

Investigations

A full blood count, the ESR, and serum urea and electrolyte levels were all within normal limits. The chest radiograph showed minimal cardiomegaly with clear lung fields; barium swallow showed hold-up of barium in the valleculae. The rest of the oesophagus was normal. Oesophagoscopy did not demonstrate any abnormality. Motility studies were also performed and demonstrated minor prolonged contractions of the oesophagus. On further clinical assessment, the patient admitted that, on rapid swallowing, food and liquid regurgitated through his nose, and neurological examination revealed minor weakness of the bulbar muscles. In view of the patient's weight loss, cardiac failure and bulbar dysfunction, a diagnosis of thyrotoxicosis was considered. Myasthenia gravis was excluded on clinical grounds. Thyroid function tests confirmed thyrotoxicosis in that the free tri-iodothyronine (T3) uptake was 77% (normal 44-59%) and that of free thyroxine (T4) was 319 μmol/l (normal 61-138 μmol/l). A thyroid scan showed a diffuse high uptake of iodine (82%). Treatment with neomercazole and propranolol was administered and his state of dysphagia improved dramatically within a week. A gain in weight and increased muscle power occurred over the ensuing 4 - 6 weeks.

Discussion

Dysphagia as a presenting symptom of thyrotoxicosis has rarely been reported. Bulbar muscle dysfunction usually becomes manifest in severely hyperthyroid patients with chronic myopathy, or with acute myopathy in association with thyroid crisis. Acute bulbar palsy in the absence of chronic thyrotoxic myopathy is extremely rare. In an unselected series of thyrotoxic patients, Ramsay found that only 3,7% presented with muscle weakness as a first symptom, of whom none had bulbar muscle weakness. However, in a more selected group of patients with chronic thyrotoxic myopathy, 16% had dysphagia in association with their myopathy. The diagnosis of thyrotoxicosis in the elderly patient is often difficult because of the absence of typical signs. This occurred in the patient described, in whom the muscle wasting and weakness, which were both distal and proximal, were interpreted as being entirely due to his cachexia. His response to therapy, however, indicated that he had, in addition, chronic thyrotoxic myopathy.

The possibility of thyrotoxicosis should therefore be considered in the elderly patient with unexplained dysphagia.

REFERENCES