presence of neoplasms or hyperplasia involving endocrine glands. The organs most often affected are the parathyroids, pancreatic islets and pituitary gland. Occasionally neoplasms of the thymus gland have been reported in this syndrome.\textsuperscript{24} Myasthenia gravis is frequently associated with thymic hyperplasia and approximately 10–15% of the patients have a thymic tumour.\textsuperscript{2} Our patient presented with bilateral thymic antibodies and a thymoma and characteristic features of MEN-I syndrome.

A previously healthy 28-year-old male was admitted to hospital with a six-week history of weakness, dysphagia, dysarthria, problems with mastication and nasal regurgitation, followed by diplopia. There was a progression of symptoms during the day and after exertion and reduced after rest. Tendon reflexes were absent in the past because of hyperparathyroidism.

Physical examination showed a slightly overweight man (height 1.72 m, weight 85 kg) with little facial hair. Internal investigations revealed the normal size of the primary and secondary sexual organs. Neurological investigation revealed slight dysartria, bilateral ptosis, facial weakness and paresis of abduction and elevation of both eyes. These symptoms fluctuated, depending on the fluctuations of exercise. Leg and knee-raising was possible for 45 seconds, no other limb muscle weakness was present. Deep tendon reflexes were normal. The functional capacity of the lungs by spirometry was within normal limits.

Laboratory investigations demonstrated serum calcium level of 3.19 mmol/l; phosphate 0.84 mmol/l; chloride 101.4 mmol/l; sodium 131 mmol/l; potassium 3.8 mmol/l; less than 103 mmol/l; parathyroid hormone level of 11.7 pmol/l (N: less than 5 pmol/l); procalciton 4.66 U/l (N: less than 0.3 U/l); glucose 4.4 mmol/l; insulin 29 U/l (N: 5–25 U/l); insulin/glucose ratio 10 (N: less than 9); serum gastrin and glucagon were normal, as 5HIAA in daily urinary excretion. Circulating antibodies to acetylcholine receptors were elevated 97 mU (N: less than 2 mU). Antistriated antibodies to the thymus were positive. There was a normal EMG pattern of the abductor digiti quinti muscle after repetitive (3 Hz) and tetanic (20 Hz) stimulation. Edrophonium chloride (Tensilon) 10 mg given intravenously resulted in a marked temporary improvement of signs and symptoms. Computerised tomography (CT) of the thorax revealed a large dense, partly cystic, anterior mediastinal mass. CT of the sella turcica showed a pituitary tumour. On echocardiography and CT of the abdomen no tumour of the pancreatic islets was seen.

The patient had a median sternotomy. A mediastinal tumour (12.5 × 8.0 × 3.0 cm) was completely excised. Microscopically the classic histological features of a benign thymoma were present with both epithelial and lymphoid cells without argyrophilia or mitoses. The tumour cells contained a cyto-keratin and antibodies to insulin, no other endocrinological activity could be demonstrated. Furthermore, a parathyroid adenoma was removed (1.5 × 0.5 × 0.3 cm) in the same session; the other parathyroid glands were normal. The patient made a slow recovery from thymectomy; some days he required intubation and mechanical ventilation because of respiratory insufficiency. On repeated postoperative examination his calcium, phosphate, insulin level and insulin/glucose ratio had normal values, the antibodies to acetylcholine receptors were reduced to 24 nM; anti-striated muscle antibodies were still positive. Nine months later he was considerably improved taking pyridostigmine 60 mg four times daily, and bromocriptine 2.5 mg twice daily.

This case represents a combination of myasthenia gravis, a benign thymoma, hyperparathyroidism and a pituitary tumour, probably a prolactinoma. The coexistence of hyperparathyroidism and a pituitary tumour is characteristic of MEN-I syndrome. The evolution of this syndrome may take years and it is inherited as an autosomal dominant trait with a very high degree of penetrance.\textsuperscript{3} The mother of our patient also had hyper-parathyroidism. Less common findings reported in patients with MEN-I syndrome included lipoma, carcinoid tumours, thymic tumours and pinealoma.\textsuperscript{3} The neoplasms of thymic origin mainly represented carcinoid tumours with a relatively poor prognosis.\textsuperscript{3} None of these cases had myasthenia gravis.

Only one other patient has been described with the combination of myasthenia gravis, hyperparathyroidism and sporadic forme fruste of the MEN-I syndrome was suggested by the author.\textsuperscript{4} Moreover, our patient had a pituitary tumour which underlines the diagnosis of MEN-I syndrome. The insulin level and insulin/glucose ratio were slightly elevated, these values, however, did not prove to be a pancreatic islet tumour. Perhaps the thymoma was responsible for this disturbance as the tumour cells reacted positively with antibodies to insulin and the value returned to normal postoperatively.

The importance of this remarkable finding is not clear, but cell surface receptors for some polypeptide hormones have been mentioned in thymoma cells.\textsuperscript{5} This reaction was negative in five other thymomas that we have investigated in recent years. The association of tumours of the thymic and pituitary glands is not surprising as these structures have a common embryonic origin from the third pharyngeal pouch.

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Magnetic resonance imaging in patients with progressive myelopathy following spinal surgery

The explanation by Mr Adams\textsuperscript{6} of the postoperative myelopathy with a biomechanical mechanism producing postoperative traction of the dura and the spinal cord during cervical movements is an adjunct to our paper, in

Korsakoff's psychosis in the presence of multiple sclerosis: an unusual cognitive state

After the publication of our letter in your journal, some inaccuracies were brought to our attention by Professor E K Warrington in whose department the patient was tested.

The difference between the WAIS IQ and the estimated premorbid IQ (NART) of the patient indicates a decline in the performance on non-verbal tests rather than general intellectual ability as stated in the article. A score of 19/30 in the McKenna and Warrington Graded Naming Test is within the average range and not indicative of normal dysphasia. The statement: "in both Korsakoff's syndrome and multiple sclerosis verbal IQs decline more than performance IQs ..." is erroneous and it would be correct to say that the performance IQ is more likely to deteriorate.

Finally, although not an inaccuracy, the Camden Memory Tests quoted in the letter are still in the process of development and low scores should be interpreted as corroborating poor performance on the standard memory tests. These corrections in no way detract from the conclusions of our letter and we feel that it is worth highlighting the need to search for other pathologies in patients with alcohol related brain damage if their clinical presentation is in any unusual way.

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