Acromegaly: uncovering unique challenges

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Acromegaly is presently under-recognised; the average delay from disease onset to diagnosis is 6-10 years. Most patients have significant comorbidities at time of diagnosis. Untreated, acromegaly impairs quality of life, increases cardiovascular morbidity, and leads to a 2-3 fold increase in mortality.

We present a 52year old Emirati woman with worsening diabetes control. She was diagnosed with type 2 diabetes in 2007 and was previously well controlled. Over the previous 18 month, her glycosylated haemoglobin had increased from 6.2% to 10.5% despite titrating dose of oral hypoglycaemic agents and adhering to diet. Previously, the patient had been seen by several male doctors and as per local culture had always been fully veiled. In a follow-up consultation by a female doctor, she was noted to have large hands, raising the question of acromegaly. On specific request to unveil she was noted to have facial stigmata of acromegaly. She admitted that she had noticed increasing shoe size and sweating over the previous year. Visual fields were normal to confrontation. Endocrine testing confirmed Growth hormone (GH) nadir 41.5 mIU/L during 75g oral glucose tolerance test and IGF-1 98.4 nmol/l (NR 11.3 – 30.9 nmol/l). Rest of pituitary function was normal. MRI pituitary failed to demonstrate convincing pituitary lesion. Chest x-ray was normal. Patient was treated medically with long-acting octreotide (Sandostatin LAR) 20mg/ 28 days. Within 2 month she made good biochemical response IGF-1 was 35 nmol/l and GH 4.3mIU/l. Glycaemic control also improved. Unfortunately over the following months treatment was complicated by intermittent compliance due to side effects of somatostatin particularly hair loss. IGF1 fluctuated between 26.9 nmol/l and 90 nmol/l; corresponding GH was between1.93 mIU/L and 17.9 mIU/L. Repeat MRI pituitary in 2011 showed a small microadenoama. Transphenoidal surgery was recommended which she repeatedly declined. Over the last 10 month her acromegalic symptoms progressed. She is currently on pegvisomant 20mg weekly and long acting octreotide 20mg /28 days. Her latest IGF-1 is 28.1nmol/l. She is still weighting her options with regards to surgery.

This case highlights the unique challenges of diagnosing acromegaly in specific patient groups. Acromegaly should be considered in the differential diagnosis of uncontrolled diabetes. Curiously, our patient did not have a visible adenoma on her initial MRI which itself is unusual.