Sweaty arms and legs – is it acromegaly?

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Introduction

19 year-old, female, presented with sweating in both arms for many years. The sweating had progressively got worse over the last several years. Occasionally, her feet and lower back were also affected. The sweating was not associated with any particular pattern and had no association with alcohol, meals or fasting. Her periods were regular. She did not have any associated symptoms such as headache and visual disturbance. She had no significant family history. She was a student, a non-smoker and only consumes a minimal amount of alcohol. On examination, her hands and feet were sweaty. Her blood pressure was 125/70 mmHg. She also had no prognathism and no other features to suggest acromegaly.

Results

IGF-1 level – 75.6 nmol/L (ref: 35-62), oral glucose tolerance test (OGTT) – nadir growth hormone level of 0.06 µg/L, MRI Pituitary - the pituitary gland was enlarged with a convex upper margin and the optic chiasm was not involved. There was an area of slight hypo enhancement within the right side of the gland. Her case was discussed at the local pituitary MDT. The likely diagnosis is acromegaly, but since there was no clear surgical target lesion on the pituitary gland, she was offered somatostatin analogues to alleviate her symptoms. We plan to perform an interval pituitary MRI scan.

Discussion

This is a rare case of likely acromegaly with discordant results. Dimaraki et al (2002) reported that serial plasma IGF-1 measurements could uncover cases of acromegaly (13% cases) despite a suppressed nadir growth hormone level following a glucose challenge. Therefore, IGF-1 alone may be adequately used to diagnose acromegaly and not to be misled by a negative gold standard OGTT. It is important to diagnose acromegaly early in these patients to bring about improvements in the morbidity and mortality associated with an elevated IGF-1 level and acromegaly.

Reference: