

Insulin-Mediated Pseudoacromegaly with Nonfunctioning Pituitary Adenoma



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- Pseudoacromegaly is a rare disorder characterized by cutaneous manifestations of growth hormone excess but with normal growth hormone levels or IGF-1. This condition described in patients with insulin resistance, hypothyroidism, pachydermoperiostitis and drug intake such as minoxidil . The hyperinsulinemia impaired metabolic signalling may activate intact mitogenic signalling pathways and stimulate pathological tissue growth (1,2).
- A 41-year old man presented with acral enlargement and excessive sweating. On physical examination He was tall (190 cm) and weighed 110 kg. His hands and feet were sweaty and enlarged. Skin tags and acanthosis nigricans of axilla, prognathism, acne were seen on examination. Serum GH:0.05 ng/mL(n:0-8.6), IGF-1: 115 ng/mL (n:101-267), prolactin :10 ng/mL (n:2.1-17.7), TSH: 1,3 uIU/ml (n:0.55-4.78) and other pituitary hormon levels were normal. After overnight 1 mg dexamethasone suppression test cortisol level was 0.8 ug/dL (n<1.8). Insulin like growth factor binding protein-3 was also normal. The fasting glucose levels were 102 mg/dL (n:70-105), fasting insulin levels were 78.2 mU/L (n:3–25). HOMA-IR: 19.6. GH level was suppressed after 75 gr. oral glucose test. Pituitary magnetic resonance imaging revealed intrasellar mass lesion 3x4x4 mm microadenoma (figure), in the left part of pituitary gland, believed to be non-secretory with normal pituitary hormonal workup.The patient did not approve of any pituitary surgery,admitted metformin 1000 mg twice daily and has been followed up.
- This is a rare case of pseudoacromagely with nonfunctioning pituitary adenoma. Physicians should be aware while evaluating patients with similar clinical and laboratory features.
- References
1- Yaqub A, Yaqub N, 2008 Insulin-mediated pseudoacromegaly: a case report and review of the literature. W V Med J 104:12-15
2- Stratakis CA, Turner ML, Lafferty A, et al, 2001 A syndrome of overgrowth and acromegaloidism with normal growth hormone secretion is associated with chromosome 11 pericentric inversion. J Med Genet 38: 338-343.

Figure: Pituitary magnetic resonance imaging

