Picture Stories

Hypothyroidism with hypertrichosis, polycystic ovaries and pituitary adenoma

Partha Pratim Halder[1], **Apurba Ghosh**[1], **Moutusi Raychaudhuri**[2]

Sri Lanka Journal of Child Health, 2012; **42**(3): 168-169

(Key words: Hypothyroidism; hypertrichosis; ovarian cyst; pituitary adenoma)

Case report

A 6 year old girl was referred for assessment with a history of poor growth for about three years, with gradually increasing dryness of skin, lethargy and growth of body hair over the previous six months. On examination she had dry skin with cold extremities. Hypertrichosis was particularly noticeable over the lateral aspects of the limbs, the forehead and the back (Figure 1).

Figure 1: ***Hypertrichosis of back***

She had Tanner stage 1 pubic hair with stage 1 breasts and axillary hair[3] and normal female external genitalia. Standing height was 110 cm (10^{th} to 25^{th} centile) and weight was 18 kg (10^{th} to 25^{th} centile) with normal body proportions. Blood pressure was 80/46 mm Hg. Tendon reflexes were normal. Skinfold thickness at triceps and subscapular sites were 25^{th} and 50^{th} centile, respectively.

[1]*Department of Paediatric Medicine,* [2]*Department of Paediatric Endocrinology, Institute of Child Health, Kolkata-17, India*

(Received on 9 October 2012: Accepted after revision on 16 November 2012)

Investigations showed normal diurnal cortisol, oestradiol, testosterone, dehydroepiandrosterone, androstenedione prolactin, 17α hydroxyl progesterone and sex hormone binding globulin concentrations. Basal thyroxine and thyroid stimulating hormone levels were 0.6ng/L (Normal 0.8 - 1.8ng/L) and 146 μIU/ml (Normal 0.5-4.7 μIU/ml) respectively. Karyotype was 46XX. Bone age was 4 years at a chronological age of 6 years. An x-ray film of the skull suggested rounding of the sella turcica. Magnetic resonance imaging (MRI) of brain showed pituitary adenoma (Figure 2).

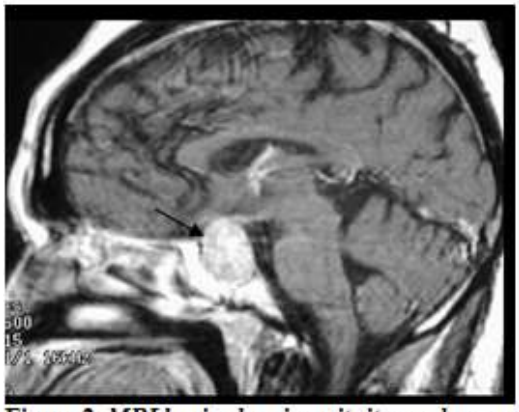

Figure 2: ***MRI brain showing pituitary adenoma***

Anti TPO antibody level was 223.05 IU/ml (Normal <5.61 IU/ml) and anti-thyroglobulin level was 135.17 (Normal <4.17 IU/ml). Thyroid scintigraphy showed poor and patchy uptake of radiotracer suggestive of subacute thyroiditis (Figure 3).

Figure 3: ***Thyroid scintigraphy***

Ultrasonography of abdomen showed bilateral ovarian cysts (Figure 4).

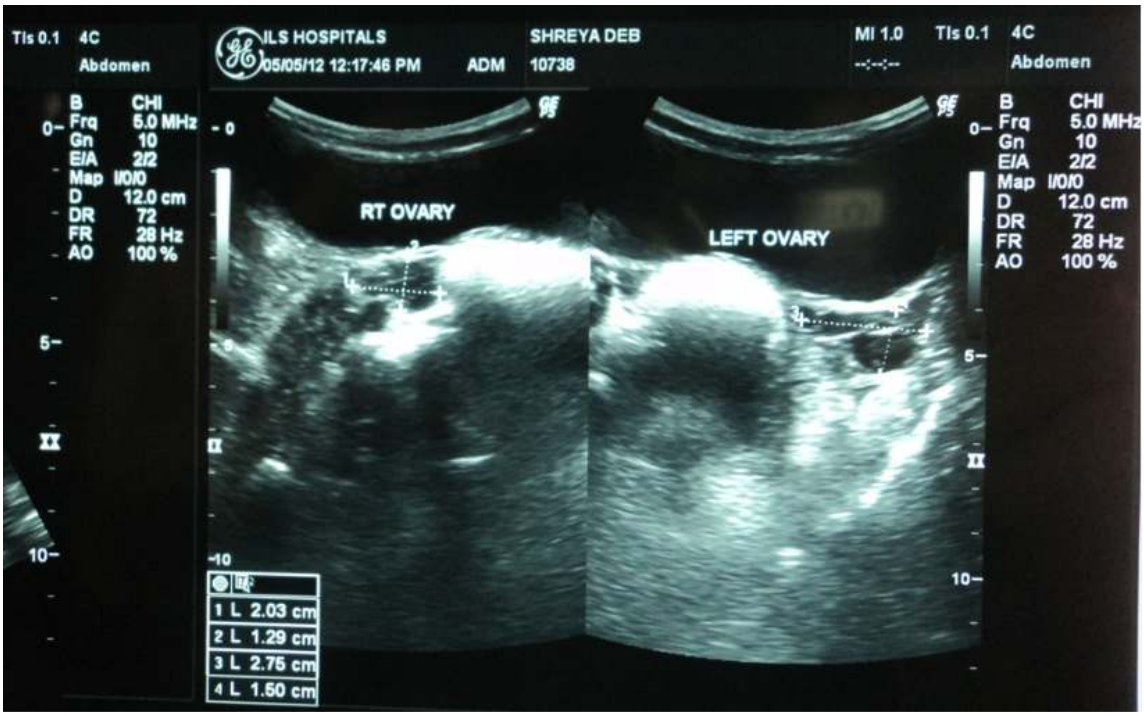

Figure 4: ***Ultrasonography of abdomen showing bilateral ovarian cysts***

Hirsutism as a manifestation of juvenile hypothyroidism has been described by Perloff[1]. Multicystic ovaries in young girls with primary hypothyroidism have been described earlier[2]. Pituitary enlargement in primary hypothyroidism, too, is a known entity[3,4].

References

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