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Objective:

Through the diagnosis and treatment of Uighur girl with adrenocortical adenoma, who was complain of short stature, to prompt pediatric endocrinologists pay attention to hypercortisolism in the diagnosis and treatment of children with short stature.

Method:

With the case report of hypercortisolism in a Uighur child, to introduce the diagnosis and treatment of adrenocortical adenoma, presenting the clinical characteristics of hypercortisolism in pediatric patient



Results:

A 3.5-year-old Uighur girl complained of short stature and unable to walk at clinic. Six months after birth, she could sit stable. But after that, she had motor retardation and could not walk all the way. Her brothers and sisters are in good health.

Physical examination: height 72 cm, body weight 10 kg, blood pressure 180/120 mmHg, central obesity, moon face, buffalo back, hypertrichosis, no obvious purple and white striae, breast Tanner stage I, muscle tension were normal, pubic hair Tanner stage III.

Laboratory examination: serum potassium 2.5mmol/l, sex hormone: LH 0.29miu/ml, FSH 2.00miu/ml, testosterone 0.31ng/ml, estradiol 14.9pg/ml, progesterone 1.50ng/ml, cortisol 33.41ug/dl, ACTH 5.30pg/ml, aldosterone 121.88pg/ml, normal thyroid function and blood gas analysis. Adrenal ultrasound: there was a goiter in right adrenal gland area, 30x19 mm, with irregular dark area. She had the typical manifestations of hypercortisolism, elevated blood cortisol, decreased ACTH with abnormal rhythm. Clinical diagnosis was confirmed of primary hypercortisolism due to right adrenal cortical tumor. Her short stature and inability to walk all due to hypercortisolism. After corrected electrolyte disturbance and antihypertensive treatment, she underwent surgery with complete resection of right adrenal tumors by urologist.

Postoperative pathological reported adrenocortical adenoma. She had glucocorticoid replacement therapy after operation. Four months later, hormones and antihypertensive drugs were reduce gradually and stopped finally. Her height was increased by 3 cm. She could stand alone and walk. Blood cortisol 1.05 ug/dl, ACTH 4.77 pg/ml, serum potassium 4.9 mmol/l, blood pressure 85/60 mmHg, height 75 cm, weight 11 kg, body shape appeared normal, without moon face, hairs significantly reduced, pubic hairs alleviated. she was completely recovered after her first visit at my clinic 4 month later.

Conclusion:

Cushing syndrome caused by adrenocortical adenoma can occur in infants and young children, with typical clinical manifestations of hypercortisolism, accompanied by short stature and motor retardation. The growth and motor development improved significantly after surgical resection. The prognosis of adrenocortical adenoma in younger child was satisfied

