INTRODUCTION:
Adrenocortical tumors are rare childhood neoplasms. More than 95% are functional and present with virilization, Cushing’s syndrome, hypertension, or hyperestrogenism. We present a exceptionally rare case of a patient with androgen- and cortisol-co-secreting adrenal adenoma.

CASE REPORT:
A 4-year-old girl presented with symptoms of virilization: moustache, pubic hair, gradual enlargement of clitoris for more than 1 year and her voice changed to male pattern deep voice. Physical examination revealed normal vital sign. She had no Cushingoid features, no hypertension. Laboratory evaluation was notable for elevated 24 hour urine free cortisol level-362.7 µg/24h (21-143 µg/24h) - and serum testosterone - 286.5 ng/dl (14-76 ng/dl) - with suppressed serum ACTH - 1.58 pg/ml (7.2-63.3 pg/ml). Levels of DHEAS, 17OH(P), LH, FSH, Estrogen were in normal range. The bone-age was 11 years. Abdominal CT scan showed a left adrenal mass. Subsequently left adrenalectomy was performed and histopathology study revealed a 5.5cm x 5cm x 3.5cm adrenal adenoma. Signs of virilization were suppressed after surgery with serum testosterone levels dropped and remain normal. At third month after resection, she was noticed to have significant symptoms of adrenal insufficiency, which serum AM cortisol and ACTH levels were low on several occasions. She was treated with hydrocortisone 10mg/m²/day, withdrew gradually and stop after 3 months. At sixth month, she had gradual enlargement of breast (Tanner B2), which positive with tests of diagnosis for central precocious puberty. She was given 3.75mg of Diphereline a month.

DISCUSSION:
- Pediatric adrenal cortical neoplasm is rare, mostly hormonal hyperfunction.
- Prognostic depend on age and tumor characteristics. There has not yet been specific test for differentiating from benign to malignant. Only in case of metastasis, neoplasm is diagnosed definitely malignant.
- Resection is the main management in order to control.
- Long term follow up is needed for discovering recurrent neoplasm, adrenal insufficiency, central precocious puberty or metastatic.
- Image and hormonal re-evaluation after every 3 months for the first 2 year and prolongs at least 10 years later.

CONCLUSION:
This is a rare case of pediatric adrenal cortical neoplasm causing central precocious puberty. Our case highlights the role of discovery and surgical resection as soon as possible to prevent the untoward effects of virilization or corticosteroid excess. Although the girl in the present study seems to have been cured, long-term follow-up is warranted.

REFERENCES: