

Clinical Image

Ectopic adrenal tissue at the spermatic cord

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This is a 19-year-old patient. His clinical examination finds an empty bursa with a palpable left testicle at the level of the inguinal canal. The ultrasound shows a right testicle at the pelvic level and a left testicle with an average inguinal location of 30/15 mm long axis. The patient underwent a lowering of the left testicle. The right testicle was intra-abdominal with a very short vas deferens and a cord, the seat of a small buff-yellow oval nodule of 5 mm requiring its ablation, associated with orchiectomy (Figure 1). The postoperative period was uneventful. The anatomopathological examination concluded cortico-adrenal tissue at the level of the spermatic cord with hypo spermatogenesis at the level of testicular sampling (Figure 2).

In children operated on for inguinal hernia or cryptorchidism, the frequency of adrenal ectopia varies from

More Information

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3.5% to 15% of cases [2]. It is reduced to 1.96% in adolescents with cryptorchidism [3].

In the majority of cases, adrenocortical ectopia is asymptomatic.

It exceptionally produced an inguinoscrotal mass requiring surgical excision.

Most often, it is a fortuitous discovery during treatment of inguinal hernia, hydrocele, or testicular ectopia as in our patient. It is distinguished by the isolated presence of adrenocortical tissue.

The absence of a medullary component confirms the congenital nature of ectopia [1].

Embryologically, the adrenal cortex arises from clusters of mesenchymal cells in the mesoderm located between the root of the dorsal mesentery and the gonadal buds.

The adrenal medulla, which derives from the neural crest, forms long after the appearance of the adrenal cortex.

The simultaneous development of gonadal buds around the sixth week of embryonic life and their early migration into the pelvis would be responsible for the anomaly.

The topography of the ectopic tissue is explained by the anatomical intimacy between the adrenal cortex and the primitive gonads during their descent into the pelvis in women (fallopian tubes and ovaries) or the scholarships in men (vas deferens, epididymis, testis) [1,4,5].



Figure 1: The right testicle was intra-abdominal with a very short vas deferens and a cord, the seat of a small buff-yellow oval nodule of 5 mm requiring its ablation, associated with orchiectomy.

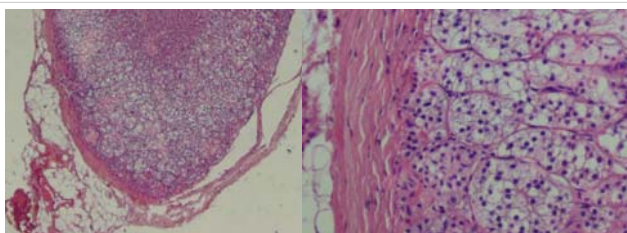


Figure 2: The anatomopathological examination concluded to cortico-adrenal tissue at the level of the spermatic cord with hypo spermatogenesis at the level of testicular sampling.



The islands of the ectopic adrenal cortex, scattered along their course, make one or more dark yellow nodules, standing out from the neighboring connective-adipose tissue. Rarely, they are confined to the retroperitoneal space, between the diaphragm and the pelvis, or remain included even in the neighboring viscera (lungs and kidneys).

Most often, ectopic tissue atrophies and disappears during childhood. Exceptionally, it persists at an advanced age as in our patient and can become functional after adrenalectomy [5].

Malignant degeneration has been reported [6].

The differential diagnosis arises with a possible metastasis of a malignant clear cell tumor, in particular that of a clear cell adenocarcinoma of the kidney.

In the absence of mass syndrome, systematic detection of adrenal ectopia is unjustified given the lack of clinical involvement.

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