

# Ectopic Adrenocortical Tissue In The Spermatic Cord In Association With Testicular Teratoma

*Spermatik Kordda Testiküler Teratomla Birlikte Ektopik Adrenonokortikal Doku*

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Ectopic adrenal cortical tissue is a benign lesion. Although routine search for this lesion is not indicated, it should be resected for histological analysis and differential diagnosis when it is found during a surgical procedure in this area. Ectopic adrenal tissue in the spermatic cord is not a very rare finding in male neonates and babies. But, to our knowledge, its simultaneous occurrence with the testicular cancer has been reported only in one case(4). In this case report, we present a 3 month old baby boy who had ectopic adrenal tissue in association with testicular teratoma in the spermatic cord.

**Key Words:** *ectopic adrenal tissue, orchiectomy, spermatic cord, testicular teratoma,*

Ektopik adrenokortikal doku benign bir lezyondur. Bu nedenle rutinde araştırılması gerekli değildir, ancak histolojik tanı ve karışabilecek patolojiler açısından cerrahi sırasında saptandığı zaman çıkarılması gerekmektedir. Spermatik kordda ektopik adrenal dokusu bebeklerde ve çocuklarda çok nadir görülen bir durum değildir, ancak testiküler kanser ile birlikteliği olan tek olgu bildirilmiştir(4). Bu yazımızda biz spermatik kordda testiküler teratom ve birlikte ektopik adrenal dokusu bulunan üç aylık bir bebek vakasını sunuyoruz.

**Anahtar Kelimeler:** *ektopik adrenal doku, orkiektomi, spermatik kord, testiküler teratom,*

Ectopic adrenal tissue (EAT) was first identified in the vicinity of the adrenal gland by Morgagni in 1740 (1). Since that time, it has been reported in many and various locations, such as kidney, liver, brain and genital tract (2,3). The explanation for the association with gonad is the close proximity of the developing adrenal cortex to genital ridge in the embryo (2). The appearance of the ectopic nodules is yellow, round and soft. Their size ranges between 1-4mm. In literature, only 1 case of simultaneous association of EAT and testicular cancer has been reported (4). In this case report, we present a 3 month old baby boy who had ectopic adrenal tissue in association with testicular teratoma in the spermatic cord.

## Case Report

A 3 month old baby boy was referred us because right palpable scrotal mass. His scrotal ultrasound (US) revealed a 32x22x16 mm solid lesion located in the inferior portion of the right testicle. Right inguinal orchidectomy was performed. The histological examination of the lesion was reported as a testicular teratoma with immature components in association with an 2mm ectopic adrenal tissue in an area adjacent to ductus epididymis, which was confirmed with the immunostaining.

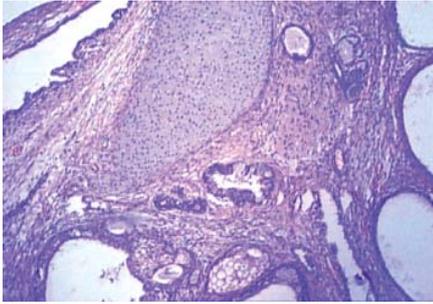
## Pathologic Findings (fig.1)

Pathologic examination of the orchiectomy specimen revealed a mass 2,5 cm in diameter, which has an heterogeneous cut surface with solid and cystic areas. Cystic

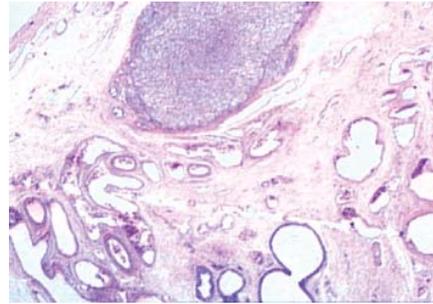
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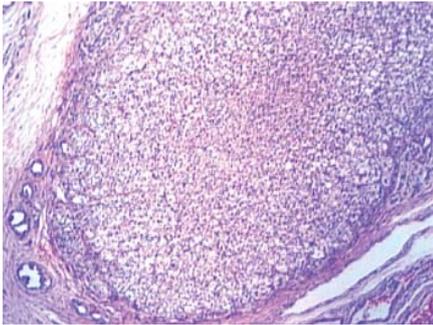
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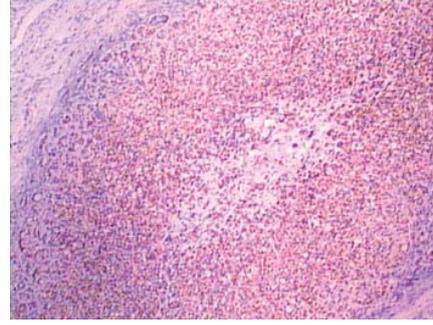
Mature elements of teratoma (HEX10)



Ectopic adrenal gland adjacent to ductus epididymis (HEX4)



Ectopic adrenal gland (HEX10)



Positive immunostaining with Chromogranin (X10)

areas were filled with mucoid and serous type fluid. Microscopically, the tumoral mass consisted of immature and mature elements together. Among the mature elements such as glial tissue, smooth muscle, nodules of mature cartilage, small cysts each lined by different type of epithelium, there were areas of primitive neuroepithelial tissue. No evidence of malignancy was present. Pathological diagnosis was immature teratoma

in the testis. In an area adjacent to ductus epididymis and distinct from the teratomatous mass, an ectopic adrenal gland, 2 mm in diameter was revealed and it was positive with chromogranin A and synaptophysin immunohistochemically.

## Discussion

Presence of ectopic adrenal tissue in

male genital tract is not a rare entity. EAT is found approximately 3% of groin explorations in children (5). In neonates, the incidence is probably 7.5-15% in the region of the testis (3). The incidence of EAT differs with the underlying diagnosis; in the published studies the incidence of EAT increases in the groin explorations for undescended testis compared against inguinal hernia (6,7). Close proximity of the adrenal gland and the genital ridge in the embryo explains the association of ectopic adrenal tissue with the gonads in the spermatic cord (2). If the risk of spermatic cord injury is low, it is plausible to excise the EAT in agreement with other authors. On the other hand, there is only one case of ectopic adrenal tissue associated with testicular cancer has been reported (4). More careful examination and dissection of the spermatic cord during orchidectomy may reveal the concomitant occurrence of these two anomalies in more cases. It might be important to know the association of the ectopic adrenal tissue with testicular cancer in the spermatic cord regarding differential diagnosis of other solid lesion of the cord. In our case careful histopathological examination with immunostaining revealed the ectopic adrenal tissue.

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