

## Bilateral ovarian capillary hemangioma

### Bilateral ovaryan kapiller hemanjiom

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#### Abstract

Hemangiomas are benign and rare tumors of female genital tract and most of them are asymptomatic. A 52-year-old woman applied to our hospital due to postmenopausal bleeding with 7 cm diameter intramural leiomyoma of the uterus. Total abdominal hysterectomy and bilateral salpingo-oophorectomy material was sent to our laboratory and it was diagnosed as bilateral ovarian capillary hemangioma. Herein we reported this case because of the extremely rare incidence of primary bilateral ovarian capillary hemangiomas.

**Keywords:** Bilateral, capillary hemangioma, ovary.

#### Öz

*Hemanjiomlar kadın genital traktusunun benign ve nadir tümörleri olup çoğu asemptomatiktir. Elli iki yaşındaki kadın hasta, uterusundaki 7 cm çapındaki intramural leiomyom ile post menopozal kanamadan dolayı hastanemize başvurdu. Laboratuvarımıza gönderilen total abdominal histerektomi ve bilateral salpingo-ooferektomi materyaline bilateral ovaryan kapiller hemanjiom tanısı kondu. Primer bilateral ovaryan kapiller hemanjiom çok nadir görülmesinden dolayı bu olguyu sunmayı uygun bulduk.*

**Anahtar Sözcükler:** Bilateral, kapiller hemanjiom, over.

#### Introduction

Hemangiomas which are vascular tumors of the ovary are benign and rare tumors of female genital tract (1). Most of them are asymptomatic and of cavernous type (2). The majority of ovarian hemangiomas may present either as isolated ovarian masses, or in conjunction with diffuse abdominopelvic hemangiomatosis (3). In most patients, ovarian hemangiomas are discovered incidentally, and their size ranges from 0.3 to 24 cm (4). Although they are nonfunctional, it is well known that luteinization of ovarian stromal cells commonly occurs as a reactive phenomenon, and may be associated with androgenic, estrogenic or progestagenic effects (3,5). Herein we report a case of a bilateral ovarian capillary hemangioma.

#### Case Report

A 48-year-old woman underwent total hysterectomy and bilateral salpingo-oophorectomy for symptomatic uterine leiomyomata.

The right ovary measured 4x3.5x2.5 cm and the left ovary measured 4x3x2.5 cm. The right ovary and the left ovary were grossly unremarkable. There was an intramural leiomyoma which was 7 cm in diameter. Microscopically, the resected right and left ovary were seen as solid lesion which contained some cystic components. The cystic components were benign simple cysts (Figure-1a,b).

The solid lesions showed proliferation of blood capillaries with proliferative single-layer endothelium and solid cell nests. There was no cytological atypia and mitotic activity (Figure-1c,d). The solid part of right ovary and left ovary stained positive for Factor VIII and CD34 (Figure-1e,f).

#### Discussion

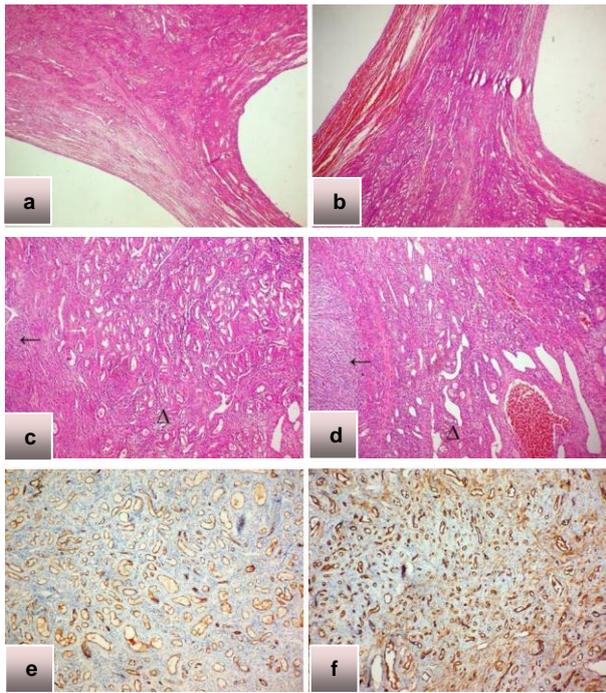
Vascular tumours are rare in the female genital tract, particularly in the ovary, even though the ovary has a rich and complex vasculature (1,6).

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**Figure-1.** The ovarian cysts **a.** The right ovarian cysts (Hematoxylin and Eosine; x40). **b.** The left ovarian cysts (Hematoxylin and Eosine; x40). Microscopic appearance of the capillary hemangiomas **c.** Microscopic appearance of the capillary hemangioma of the right ovary; the ovarian stroma (arrow) and the hemangioma (arrow head) (Hematoxylin and Eosine; x100). **d.** Microscopic appearance of the capillary hemangioma of the left ovary; the ovarian stroma (arrow) and the hemangioma (arrow head) (Hematoxylin and Eosine; x100). Microscopic appearance of the capillary hemangiomas immunohistochemically stained. **e.** Microscopic appearance of the capillary hemangioma immunohistochemically stained for Factor VIII (IHC; x100). **f.** Microscopic appearance of the capillary hemangioma immunohistochemically stained for CD 34 (IHC; x100).

Hemangioma is a benign tumor with proliferative vessels with unclear borders. Many such tumors occur in the skin, head, and neck. Sometimes they are congenital,

occurring in infants and juveniles. The origin of hemangioma is unknown, some state that its origin is true tumor or hamartoma, or stimulated vessels (7). Hemangioma of the ovary was first described by Payne in 1869 (cited by Talerman) (8). Ovarian hemangiomas have been reported both in adults and children with an age range from infancy to 81 years (9).

Hemangiomas arise from a failure in vascular formation, particularly in the canalizing process, forming abnormal vascular channels. There are two types: Cavernous and capillary. The difference between them mainly depends on the size of the blood vessel formation. Unlike the rest of the body where capillary hemangiomas are more common, usually cavernous hemangiomas develop in the ovaries. Our case was diagnosed as capillary hemangioma which was more rare than cavernous hemangiomas. Moreover, it was detected bilaterally in the ovaries.

In differential diagnosis, a mature cystic teratoma should be distinguished from hemangioma. Mature cystic teratoma of the ovary with florid vascular proliferation has been reported in the literature (10). Conditions to consider in the differential diagnosis of ovarian solid tumors include the following: Carcinoma, sarcoma, fibroma, Brenner tumor and hemangioma.

Further classification of hemangioma is as follows: (i) capillary hemangioma, as in our case; (ii) granular tissue type hemangioma; (iii) cavernous hemangioma; (iv) venous hemangioma; (v) racemose hemangioma; (vi) epithelioid hemangioma; (vii) acquired tufted hemangioma; (viii) glomeruloid hemangioma; (ix) intramuscular hemangioma; and (x) angiomatosis. In our case, the hemangioma stained positive for CD34. The CD34 is a specific antigen to endothelial cells and stem cells of hematogenesis. Thus, it was considered that the hemangioma part derived from endothelial cells. Likewise, the hemangioma part of the tumor stained for Factor VIII in our case.

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