Mature teratoma of the uterine corpus: A case report

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SUMMARY

We report a case of a 37-year old female with a mature teratoma of the uterine corpus presented by metrorrhagia. Grossly, the tumor was polypoid without apparent invasion into the myometrium. Microscopically, the tumor consisted of disorganized mature neural tissue intermingled with nodular foci of cartilaginous tissue, groups of seromucionous glands and ciliated columnar respiratory epithelium. Fifteen months after the diagnosis, the patient showed no signs of tumor relapse. Then she was lost for a follow-up. Teratoma of the uterine corpus is rare; to the best of our knowledge only about 20 cases have been reported to date.

Keywords: teratoma – uterus – pluripotent stem cell – primordial germ cell

Zralý teratom těla děložního: kazuistika

SOUHRN

Prezentujeme případ 37leté ženy se zralým teratomem těla děložního, který se klinicky projevil metroragií. Makroskopicky se jednalo o polypoidní nádor bez patrné invaze do myometria. Mikroskopicky byl nádor tvořen rozsáhlými oblastmi desorganisované zralé nervové tkáně promísené s ložisky nodulárně uspořádané chrupavky, skupinami seromucinózních žlázek a oblastmi s cylindrickým řasinkovým epitelem respiračního typu. Pacientka byla 15 měsíců po diagnóze bez známek recidivy onemocnění. Teratomy děložního těla jsou vzácné léze, doposud bylo popsáno pouze zhruba 20 případů.

Klíčová slova: teratom dělohy – pluripotentní kmenová buňka – primordiální zárodečná buňka

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Teratomas are the most frequent type of germinal tumors. They can be either monodermal or they consist of two or three germ layers. Mature teratomas consist of differentiated adult-type tissues, while immature teratomas contain a variable portion of fetal or embryonal-type tissues (1). Most teratomas occur in gonads, but they can also arise extragonadally, especially in the sites of primordial germ cells migration along the body axis (from the pineal gland to the coccyx) (2). Rarely, teratomas can be found in other sites (3-5). We present a rare case of a mature teratoma arising in the uterine corpus (6-10).

CASE REPORT

A 37-year old female presented with metrorrhagia lasting for 9 days. The patient's serology showed normal hCG level, and was referred for further treatment to the Department of Obstetrics and Gynecology, First Faculty of Medicine and General University Hospital in Prague. The initial transvaginal ultrasound revealed a nonhomogeneous partly polypoid vascularized mass, 30 mm in largest diameter, localized in the endometrium. Subsequently, the patient underwent a hysteroscopy with the resection of a polyp measuring 30 x 15 x 15 mm. A transvaginal ultrasound was performed 16 days later and showed normal findings. Fifteen months after the diagnosis, the patient showed no signs of tumor relapse. Then she was lost to follow-up.

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MATERIALS AND METHODS

Sections from formalin-fixed, paraffin-embedded tissue blocks were stained with hematoxylin-eosin. Selected sections were analyzed immunohistochemically using the avidin-biotin complex method with antibodies against GFAP (clone 6F2, 1:1000, Dako, Glostrup, Denmark) and S100 protein (polyclonal, 1:1600, Dako, Glostrup, Denmark).

RESULTS

Grossly, the material consisted of several tissue fragments up to 30 x 15 x 5 mm.

Microscopically, the fragments were partly polypous and were composed of disorganized mature neural tissue intermingled with nodular foci of cartilaginous tissue, groups of seromucionous glands and ciliated columnar respiratory epithelium (Fig. 1A, B). Moreover, there were focal areas of mature neural tissue located in the surrounding endometrial stroma (Fig. 1C). Focally, a stratified squamous epithelium with hyperkeratosis was present on the surface of tissue fragments. Immunohistochemically, the neural tissue expressed GFAP and S100 protein (Fig. 1D). Expression of S100 protein was also present in cartilaginous ti-