

# QUIZ

## CORRECT ANSWER TO THE QUIZ. CHECK YOUR DIAGNOSIS

### UTERUS-LIKE MASS

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Uterus-like mass (ULM) reported also under a name of “endomyometriosis” or “metriosis” is a rare finding which was first described in 1981 [1]. It is supposed to be a special form of extrauterine adenomyoma macroscopically and microscopically imitating the uterus. Until now not more than 20 cases have been reported in the literature [2] – most of them were found in the region of the ovaries. Extra-ovarian cases have also been described [2, 3].

Uterus-like mass can be found incidentally, however most cases present with lower abdominal or pelvic pain [4, 5], sometimes accompanied by abnormal uterine bleeding [4, 6], weakness of the legs [7], vomiting or diarrhoea.

Macroscopically, this cystic lesion is often filled with hemorrhagic, dense, chocolate coloured or serous fluid.

Microscopically, the central cavity of the mass is lined by endometrium and surrounded by smooth-muscle bundles, resembling the structure of the uterine corpus. The endometrium may consist of small but well-organized endometrial glands within typical stroma or only a thin layer of endometrial stroma lined by pseudo-stratified columnar epithelium. In

one case, well-developed secretory-phase endometrium was described [6]. A small amount of residual ovarian tissue can be seen within the mass [8]. Rare mitotic figures can be present in the endometrial-type stroma, but neither atypia nor necrosis is described either in the epithelial or mesenchymal component.

Immunohistochemical analysis demonstrates oestrogen and progesterone receptors immunoreactivity in nuclei of epithelial and stromal cells of endometrium and in some smooth muscle cells. Staining for CD10 is positive in endometrial stromal cells and smooth muscle actin (SMA) in spindle cells.

Uterus-like mass can be accompanied by uterine or renal system congenital anomalies [3, 7], however in most patients no such anatomic abnormalities were found. Some patients had an elevated CA125 level [8, 9].

Preoperatively, in the USG or MRI picture, ULM is sometimes considered malignant, suspicious for an endometrial stromal sarcoma or leiomyosarcoma, with central fluid-filled space interpreted as necrosis. Some ULM can also be misdiagnosed as ovarian endometriotic cyst or leiomyoma.

Histogenesis of ULM remains uncertain. Three different theories have been proposed. Uterus-like mass could be a congenital malformation caused by a defect in fusion of mullerian ducts [7]; it could be the effect of metaplastic transformation of subcelomic mesenchyme [10] or be due to heterotopia [3]. Most authors favour the first theory. Above all the most important information for the clinicians is that ULM is not a neoplasm. In most patients surgical removal of the mass was an adequate treatment. Two patients received GnRH agonist therapy in addition.

#### References

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**Fig. 1.** The macroscopic picture of the material sent for pathological examination

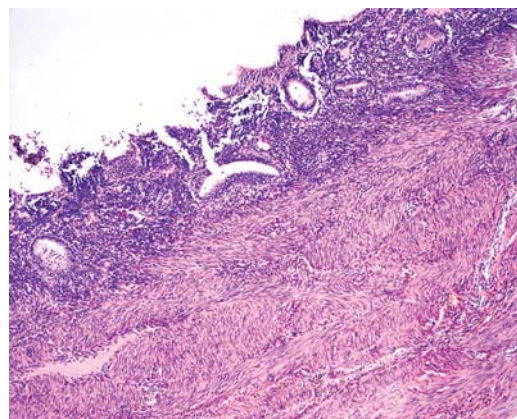
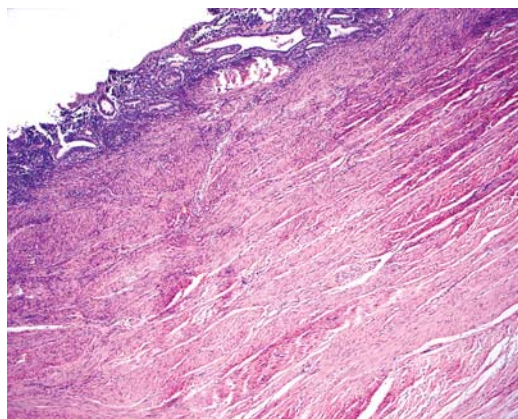


Fig. 2-3. Histological findings (haematoxylin-eosin)

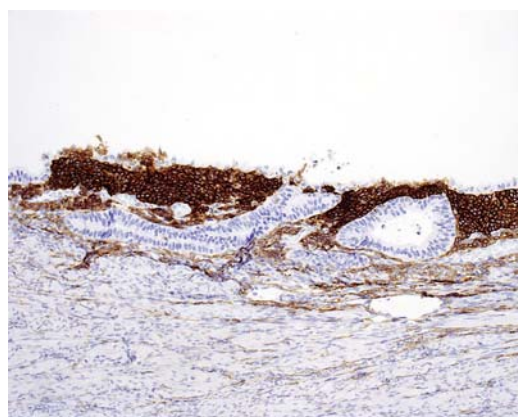


Fig. 4. Immunohistochemistry: CD10

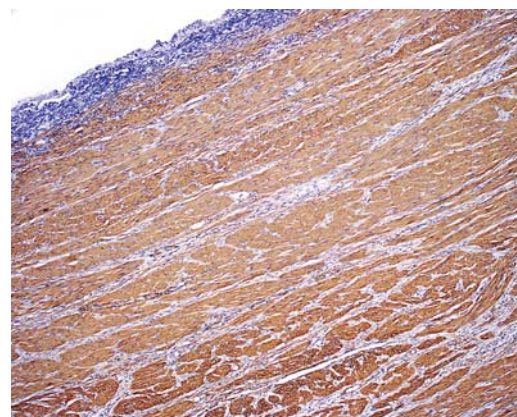


Fig. 5. Immunohistochemistry: SMA

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