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Epithelioid Leiomyoma of Uterus: A Rare Variant

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Abstract: Epithelioid Leiomyoma is a rare atypical smooth muscle tumor of the uterus. Here we present a case of epithelioid leiomyoma of the uterus in a 42-year-old woman who attended out patient department with complaints of bleeding per vagina. Grossly it was a well-circumscribed solitary mass measuring 5× 4 ×3 cm and microscopically it was composed of bundles of smooth muscle cells with extensive areas of hyalinization and polygonal cells with clear to eosinophilic cytoplasm in clusters.
Keywords: Epithelioid Leiomyoma, Smooth muscle tumor, Uterus

INTRODUCTION

Uterine leiomyomas, or fibroids, represent a major public health problem. Epithelioid leiomyoma is a rare atypical smooth muscle tumor of the uterus. Uterine leiomyomas, or fibroids, are the most common tumors of women, probably occurring in the majority of women by the time they reach menopause and becoming clinically significant in about one third of women [1]. There is a suggestion of slightly increased risk of fibroids associated with early menarche, although the risk has often not been statistically significant [2-4].

CASE REPORT

A 42 year old multiparous woman presented with foul smelling discharge and on and off per-vaginal bleeding since 1year. Past menstrual history revealed normal cycles. Patient's general and systemic examination was normal except for severe pallor. On examination no mass per abdomen or mass per vagina were seen. Ultrasound abdomen showed a bulky uterus with fundus & attached to uterus showing round hyper echoic area measuring 4 X 3cm. The ultrasound findings were suspicious for fibroid. Total abdominal hysterectomy with bilateral salpingo-oophorectomy was performed. Post operatively the specimen was sent for histopathological examination.

Pathological examination showed solitary well circumscribed sub serosal mass measuring 5x4x3 cm (Fig. 1). Cut section of the nodule showed yellow areas with cystic spaces. Microscopy showed polygonal cells with clear to eosinophilic cytoplasm in clusters. Bundles of smooth muscle cells with extensive areas of hyalinization and sex cord – like pattern of arrangement of the cells were seen (Fig. 2). Histopathologically it was diagnosed as epithelioid leiomyoma.

Fig. 1: Sub serosal mass attached to the uterine wall

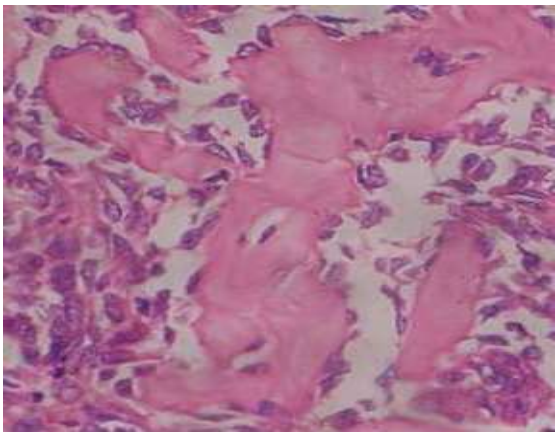

Fig. 2: smooth muscle cells with extensive areas of hyalinization (H&E x100)

DISCUSSION

Leiomyomas of the uterus are extremely common neoplasms. The overall incidence is between 4% and 11 %, but it rises to nearly 40% in women over the age of 50 years. Clinically apparent' lesions are less common in parous than nulliparous women and premenopausal than postmenopausal women [3].

Epithelioid leiomyoma are also called as clear cell leiomyoma or benign leiomyoblastoma. It is partially or totally composed of rounded or polygonal cells. Mixtures of epithelioid, clear cell, and plexiform patterns occur frequently enough to suggest that they represent variants of a single entity [5, 6]. Ultrastructural studies have also provided support for the smooth muscle derivation of this peculiar neoplasm, as well as for several other types of myometrial tumors of unusual appearance [7, 8]. Morphologically, similar tumors occur in the round ligament [9].

The mean age of presentation of epithelioid leiomyoma is 48 years. Common clinical manifestation includes abnormal bleeding (36%), abdominal / pelvic pain (23%), menorrhagia (23%) and mass per abdomen (14%) [6]. In the present case the age of the patient was 42 years and presented with abnormal vaginal bleeding.

Differential diagnosis include endometrial stromal tumor, pure sex cord stromal like tumors, epithelioid leiomyosarcoma and perivascular epithelioid cell tumors (PEComas). Presence of smooth muscles rules out endometrial stromal tumor and sex cord like tumor.

Epithelioid leiomyosarcoma have high cellularity, necrosis and mitosis (> 5/10 HPF) [10]. Microscopic sections studied showed polygonal cells with clear to eosinophilic cytoplasm in clusters. Bundles of smooth muscle cells with extensive areas of hyalinization and sex cord – like pattern of arrangement of the cells were seen. Histopathologically it was diagnosed as epithelioid leiomyoma.

CONCLUSION

To conclude, there are certain uncertainties in the behavioral pattern of Epithelioid Leiomyoma. Two or more following features are not well established to assess the behavior of Epithelioid Leiomyoma.

- Large size (>6cm)
- Moderate mitotic activity (2-4 mitotic figures/10 HPF)
- Moderate to severe cytological atypia
- Necrosis.

Hence, they are classified as uncertain malignancy and careful follow up is needed [10].

REFERENCES

1. Dixon D; Etiology and pathogenesis of uterine leiomyomas: a review. (Research Review). Environmental Health Perspectives, 2003. Available from http://www.thefreelibrary.com/Etiology+and+pathogenesis+of+uterine+leiomyomas%3A+a+review.+%28Research...-a0106422240
2. Cramer SF, Horiszny JA, Leppert P; Epidemiology of uterine leiomyomas with an etiologic hypothesis. J Reprod Med., 1995; 40(8): 595–600.
3. Parazzini F, La Vecchia C, Negri E, Cecchetti G, Fedele L; Epidemiologic characteristics of women with uterine fibroids: a case-control study. Obstet Gynecol., 1988; 72(6): 853–857.
4. Samadi AR, Lee NC, Flanders WD, Boring JR 3rd, Parris EB; Risk factors for self-reported uterine fibroids: a case-control study. Am J Public Health, 1996; 86(6): 858–862.
5. Hyde KE, Geisinger KR, Marshall RB, Jones TL; The clear-cell variant of uterine epithelioid leiomyoma. An immunohistologic and ultrastructural study. Arch Pathol Lab Med., 1989; 113(5): 551-553.
6. Kurman RJ, Norris HJ; Mesenchymal tumors of the uterus. VI. Epithelioid smooth muscle tumors including leiomyoblastoma and clear-cell leiomyoma. A clinical and pathologic analysis of 26 cases. Cancer, 1976; 37(4): 1853-1865.
7. Dickersin GR, Selig MK, Park YN; The many faces of smooth muscle neoplasms in a gynecological sampling: an ultrastructural study. Ultrastruct Patho1., 1997; 21(2): 109-134.
8. Mazur MT; Clear cell leiomyoma (leiomyoblastoma) of the uterus; Ultrastructural observations. Ultrastruct Pathol., 1986; 10(3): 249-255.
9. Bakotic BW, Cabello-Inchausti B, Willis IH, Suster S; Clear-cell epithelioid leiomyoma of the round ligament. Mod Pathol., 1999; 12(9): 912-918.
10. Hendrickson MR, Tavassoli FA, Kempson RL, Mccluggage WG, Haller U, Kubik-Huch RA; Mesenchymal tumours and related lesions. In Fattaneh A, Tavassoli F.A, Devilee P editors; World Health Organisation classification of tumors. Pathology and genetics of tumours of breast and female genital organs. IARC Press: Lyon, 2003: 233-244.