

Pure Uterine Lipoma



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Abstract:

Pure uterine lipoma is an uncommon benign mesenchymal neoplasm. It is generally seen in postmenopausal women presenting with abdominal pain. We describe a case of 70 year old woman who presented with abdominal pain and was diagnosed as uterine lipoma.

Key words: Lipoma, Abdominal Pain, Neoplasms, Postmenopause, Uterus, Humans.

Introduction

Lipomatous tumors of the uterus are rare benign neoplasms usually mixed with other mesenchymal neoplasms. Pure uterine lipoma – also named as “uterine fatty tumor” – usually occurs in postmenopausal women 50 to 70 years of age [1-4]. Incidence varies from 0.03-0.2%. These are often misdiagnosed as malignancy in view of presentation in later age. Most of the patients are asymptomatic. The signs and symptoms are similar to those caused by leiomyomas of the same size such as palpable mass, excessive menstrual bleeding and pelvic pain [5]. Uterine lipoma should be included in differential diagnosis of postmenopausal women presenting with abdominal pain or menorrhagia.

Case Report

A 70 year old woman was admitted with a

complaint of pain abdomen. Pain was insidious in onset, gradually progressive, dull aching and non-radiating. She was postmenopausal with regular menstrual cycles in the past. On examination, her vitals were stable. On per abdomen examination, no mass was felt. Cervix, vagina were healthy on vaginal and per speculum examination. Routine investigations including carcinoma antigen-125 (CA-125), carcino embryonic antigen (CEA) & alfa-feto protein (AFP) were in normal range.

Ultrasound scan showed hyperechoic and homogenous space occupying lesion of size 5.8x4.6 x5.6 cm, in left adnexa abetting the uterus. MRI confirmed presence of well defined, round mass lesion 4.6x4.2x4.4 cm which was hyperintense on T1, isointense on T2 and suppressed on Short Tau Inversion Recovery (STIR) images suggesting fat

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containing lesion. Uterus was atrophic with mass in centre. Planes between mass & uterus were not clearly defined [Fig.1].

Total abdominal hysterectomy and salpingo-oophorectomy was done. On gross examination the uterus weighed 250 grams and measured 6x4x3 cm. The uterus body show left sided circumscribed mass of 4.5 cm, arising from wall of uterine fundus. Cut section show yellowish greasy tumor mass. Fallopian tubes and ovaries did not show any significant pathology [Fig.2]. Multiple sections were processed and stained with Hematoxylin & Eosin. The sections show lobules of mature adipocytes separated by thin vascular connective tissue. The myometrium was pushed to periphery forming a pseudo-capsule with atrophic endometrium. Histopathology confirmed the diagnosis of pure lipoma [Fig.3,4].

Discussion

Lipomas are defined as encapsulated adipose tissue with thin septa of fibrous tissue with smooth muscles confined to the periphery of the tumor [6].

Lipomatous tumors can be subdivided into pure lipoma, mixed lipoma and liposarcoma [3].

Various hypothesis that have been put forward to explain development of pure uterine lipoma include (i) misplaced embryonic mesodermal retaining potential for lipoblast differentiation. (ii) totipotent mesenchymal cell transformation. (iii) metaplasia of smooth muscle into adipose cells. (iv) perivascular fat cells proliferation [1,3]. Tumor typically appears as a well-defined homogenously hyperechoic lesion on ultrasound with surrounding hypoechoic rim representing adjacent compressed myometrium [3,7]. MRI is best modality for determining internal architecture of a tumor and the presence of fat [8]. MRI is modality of choice because of its multi planner capability and its ability to demonstrate fat component of the lesion. It is essential to differentiate lipomatous uterine tumors from other lesions especially ovarian teratoma which requires surgical intervention [3]. The woman described in this case report was 70 year old postmenopausal who presented with abdominal pain. Preoperative diagnosis was made by MRI and was pathologically confirmed postoperatively.



Fig.1: MRI reveals sagittal spin-echo T1-weighted MR image shows 46x42 mm, hyperintense well circumscribed mass (arrow) in myometrium of corpus uteri.



Fig.2: The cut section of uterus showed a well circumscribed, homogenous yellow colored intramural tumor of 5 cm diameter (long arrow) with uterus and cervix (short arrow).

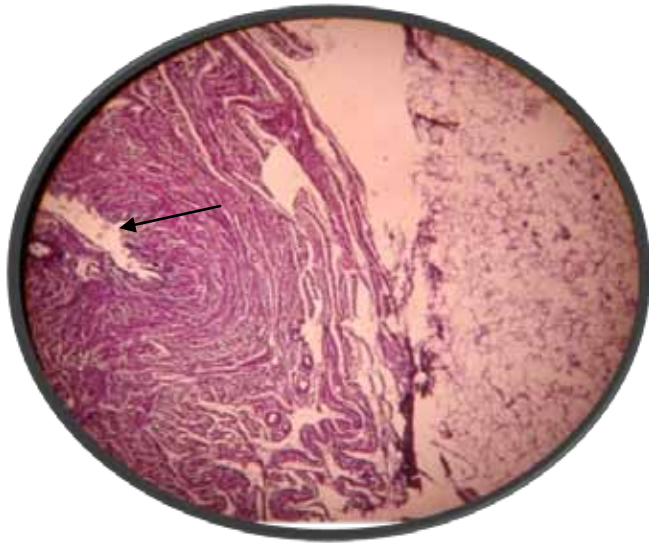


Fig.3: Microphotograph showing thin atrophic endometrium (long arrow) with an intramural tumor composed of mature adipose tissue (short arrow). (Haematoxylin and Eosin, x 40).

Conclusion

Pure uterine lipoma is very rare, however, awareness is the key to diagnosis and appropriate management. MRI and Hemotoxylin and Eosin staining may be helpful. Optimal management avoids unnecessary surgery and provides a good outcome.

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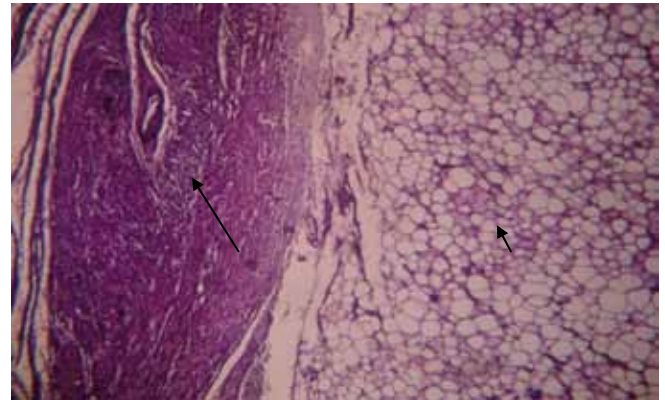


Fig.4: Microphotograph showing myometrium (long arrow) with an intramural tumor composed of mature adipose tissue (short arrow) (Haematoxylin and Eosin, x 100).

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