Pure Lipoma of Uterus-rare site for a common tumor

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I. Introduction

Lipoma is one of the most common soft tissue tumors. It can very rarely present in other solid organs. The diagnosis is purely pathological since preoperatively it is very difficult to diagnose.

We report a case of 60 year old patient with complaint of vague lower abdomen pain diagnosed with an ovarian mass on CT scan. Postoperatively the mass was found to be a Pure lipoma of the myometrium.

II. Case Report

A 60 year old parous, postmenopausal woman presented with vague pain in the lower abdomen since last 6 years. She attained menopause 10 years back. She was a known case of hypertension and type II diabetes since last 8 years. On examination, abdomen was soft, Per speculum findings were unremarkable. On bimanual examination uterus was less than normal size, with fullness present in left adnexa ,an ovarian mass was suspected. On investigations, Ultrasonography showed a 8cm x 10 cm mass probably a complex ovarian mass on left side. Endometrial thickness was 3mm and right ovary was not visualised. A CT scan (Figure 1) was done which revealed a complex left ovarian mass with features suggestive of a Dermoid cyst. As ovarian mass was suspected, tumor marker Ca 125 was advised and found to be normal. A Total Abdominal Hysterectomy with bilateral salpingooopherectomy was thus planned.

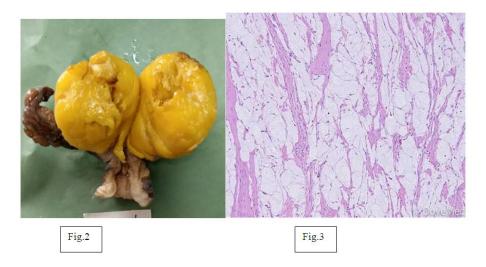
Intraoperatively, Uterus appeared bulky with a tumor present on the the body of the uterus. Grossly it appeared as a solid mass of 9 x 8 cm, yellow in colour (Figure 2)like fatty degeneration of fibroid. Bilateral adnexae and ovaries were normal. Cut section through the body of uterus showed a yellow tumor occupying the myometrium and a grossly thin endometrium.

Microscopy revealed a benign tumor of mature adipocytes separated by thin septae (Figure 3). No true tumor capsule was present surrounded by adjacent myometrium. Myometrium showed no other leiomyoma. There was no evidence of atypia or malignancy in the adipocytes. Endometrium was atrophic. Cervix, tubes and both ovaries were unremarkable.

Based on the histopathological report a diagnosis of Pure Lipoma of the myometrium was made. Postoperative period was uneventful.



Fig.1



III. Discussion

Fatty tumors primary to the uterus are uncommon and almost invariably benign. Incidence of fatty tumors in the uterus is 0.03 to 0.2%.(1) This includes mixed lipoma and pure lipoma of the uterus .The most common lipomatous tumour is a mixed lipoleiomyoma.(2) The first case of Pure lipoma of uterus was published in the year 1816 by Lopstein and since then less than 20 cases have been published in pure form.(9)Clinically,they may be asymptomatic or may present with pain, palpable mass, pelvic discomfort or abnormal postmenopausal bleeding occasionally. It is most commonly seen in postmenopausal age group. These tumors are most commonly located in the uterine corpus but also have been reported in cervix and ovary. Grossly, they may range from few millimetres to 5 to 10 cm in size. They may be concomitant with a leiomyoma of uterus.(3) Histopathological examination reveals a tumor composed of mature adipocytes with a false capsule formed by surrounding thin myometrium. No smooth muscle cells or fibrous cells are seen within the tumour. It may be confused preoperatively with a leiomyoma or an ovarian teratoma . They are often misdiagnosed as a uterine sarcoma due to its appearance in older age group and also due to its rapid progression. Imaging techniques may also fail to diagnose accurately .In CT scan or MRI abdomen they may be misdiagnosed as a dermoid cyst , ovarian teratoma or a fatty degeneration of fibroid. The diagnosis is purely histopathological.(2)

The largest case series of uterine fatty tumors is a case series of 10 cases in which 9 were mixed lipoleiomyomas and only one was a pure lipoma.(4) The largest case series of a Pure lipoma is of only three cases. (5).Histogenesis of these tumors is still uncertain .It has been proposed that it could be due to misplaced embryonal cell nests or primitive mesenchymal tissue or metaplasia of stomal cells.(5)

Due to postmenopausal age group, its rarity in occurrence, uncertainty of diagnosis and need for postsurgical confirmation by histopathology, surgery by Total abdominal hysterectomy with bilateral salpingoopherectomy is the best modality of treatment. Though they are mostly benign certain association between uterine lipomas and endometrial polyps and more rarely with endometrial carcinoma has been reported.(6) Malignant conversion of a Pure lipoma is very rare hence it has an excellent prognosis.(7)

IV. Conclusion

Pure Lipoma of the uterus is a very rare entity creating a diagnostic dilemma preoperatively. Histological confirmation is mandatory. It is essentially benign and has an excellent prognosis.

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