

Uterine Lipoma Clinically Masquerading as Leiomyoma

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Abstract

Pure lipoma arising from uterus is a rare entity. The clinical presentation or gross appearance of uterine lipoma may mimic a sarcomatous lesion and may lead to a diagnostic confusion. The presenting complaints and clinical features are similar to that of leiomyomas. Regarding the histogenesis, it is still not clear from where these lesions originate. We report a case of a 45 year old woman who presented with menorrhagia and intermittent abdominal pain of 1 year duration. Pathological evaluation revealed pure intramural lipoma of the uterus with characteristic morphological features and no evidence of sarcomatous component.

Keywords: Lipoma, Adipose tissue, Uterine tumor, Uterus.

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Introduction

Lipoma is the most common soft tissue tumor but a pure lipoma arising from uterus is a rare entity.¹ The clinical presentation or gross appearance of uterine lipoma may mimic a sarcomatous lesion and may lead to a diagnostic confusion.^{2,3} The presenting complaints and clinical features are similar to that of leiomyomas. The females that present with this type of lipoma are usually of postmenopausal age group.⁴ These lipomas mostly arise from the body of the uterine corpus and their size varies from very small to large.⁵ It is difficult to diagnose this lesion preoperatively and is confirmed on histopathology postoperatively, especially to exclude the possibility of a malignant tumor.⁶ Regarding the histogenesis, it is still not clear from where these lesions originate.⁷ There are certain conditions in which adipose tissue is present inside the uterus such as in a variant of leiomyoma (Lipoleiomyomas) having fat component along with smooth muscle fibres but it is rare to have tumors inside the uterus comprising exclusively of mature adipose tissue.⁸

Case Report

A 45 year old woman presented with menorrhagia and intermittent abdominal pain of 1 year duration. Gynaecological examination revealed slightly enlarged uterus and a circumscribed mass was identified on ultrasonographic examination and clinical diagnosis of uterine leiomyoma was made. Abdominal hysterectomy was performed by the gynaecologist with conservation of both ovaries. Uterus was uniformly enlarged and measured 16 x 14 x 12cm shown in figure 1. Its cut surface showed patent uterine cavity and a circumscribed intramural yellowish coloured mass was seen measuring 12cm in diameter. Cervix was unremarkable. Histopathological examination of intramural uterine mass revealed sheets of mature adipocytes with scanty fibrovascular stroma. No fibrous or smooth muscle component were prominent. Endometrium showed atrophic changes and sections from cervix showed chronic cervicitis. The Final histological diagnosis of uterine lipoma was established as shown in figure 2.



Figure 1. Uterine cavity showing a circumscribed intramural yellowish coloured mass measuring 12cm in diameter.

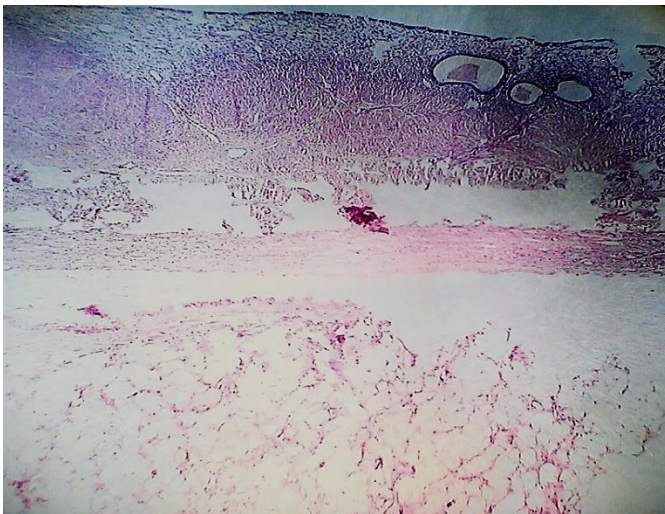


Figure 2: Intramural uterine mass showing sheets of mature adipocytes with scanty fibrovascular stroma and atrophic endometrium.

Discussion

Only a few cases of pure lipomas of the uterus have been reported in the literature.⁴ It is still an enigma how these lipomatous tumors have originated from the uterine wall. There is also an unresolved dispute regarding the histogenesis of these tumors.⁹ Normally adipose tissue does not arise from the uterus and therefore there are various theories regarding its histogenesis in this organ. The presence of adipose tissue can be due to misdirected embryonic fat cells or some metaplastic transformation of connective tissue into fat cells. Possibility of some specific primitive

connective tissue cells that may have differentiated into lipocytes or some perivascular fat cells is another likely explanation. Other possible causes include penetrance of fat cells at the time of surgery into the uterine wall or some sort of degenerative changes of the connective tissue.¹⁰ Mostly these tumors arise in middle aged or elderly women. The women presenting with this tumor have clinical signs and symptoms similar to those found in leiomyomas.⁴ The uterine fatty tumors can sometimes mimic sarcomas causing a diagnostic confusion. Uterine lipoma was first described by Lopstein in 1816, very few cases have been published in their pure form until now.⁴ Some of the authors Krenning¹¹, Will'en⁸, or Sieinski¹² presented with cases of lipomatous lesions in uterus as a component of leiomyomas. Clinical manifestations of uterine lipoma are similar to leiomyoma and most of the cases present with complaints of uterine bleeding and some cases present with abdominal pain as the tumor grows in size. As compared to Leiomyomas of uterus, Lipomas usually occur in females of higher average age and these tumors mostly present after menopause.¹¹ Our patient was 45 years of age at the time of diagnosis. The confirmation of these lipomatous tumors is done on histological analysis of uterus, although some studies have shown that radiological techniques can also indicate their presence in uterus.¹³ The diagnosis of primary pure lipoma on histopathology should be made only if the smooth muscle cells are confined to the periphery of the lesion.¹⁴

In conclusion, lipoma of the uterine corpus is a rare entity and these tumors clinically present with features similar to other sarcomatous lesions of uterus and therefore histological confirmation is necessary. Uterine lipomas have an excellent prognosis and can be considered for the differential diagnosis of uterine mass in postmenopausal women.

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