



**UTERINE POSTMENOPAUSAL FIBROID WITH CALCEROUS DEGENERATION  
IN A HEPATITIS 'B' PATIENT**

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**Abstract:** Uterine leiomyomas are common in women of child-bearing age group but rare in postmenopausal women. They present a greater diagnostic challenge because of dilemma related with differential diagnosis of leiomyosarcoma for that age. Here we present a HBsAg positive case of a 50-years-old postmenopausal woman with a persistent intra-mural fibroid with secondary calcereous degeneration who presented as pelvic pain. This is probably first such HBsAg positive case presenting at such an age. The case was successfully managed by hysterectomy.

**Key words:** Hepatitis B, post menopausal, uterine fibroid, calcereous degeneration.

**Introduction:** Leiomyoma is the most common benign tumor of smooth muscle arising from uterus and its supports. The incidence of fibroids is >80% by the age of 50 years. They are most commonly intramural, subserosal, submucosal and cervical. Uterine sarcoma is rare (3 to 7 per 100,000 in the United States population) with a poor prognosis.<sup>1-4</sup>

Clinicians who are evaluating a woman with presumed leiomyomas are presented with the clinical challenge of deciding which rare patients may have sarcoma. While there are

differences in the populations of the two disorders, there is some overlap. There are several histologic types of uterine sarcoma. The main type of sarcoma that may resemble a leiomyoma is leiomyosarcoma, which presents as a myometrial mass. In contrast, endometrial stromal sarcoma presents as an endometrial mass. However, this could potentially have a similar appearance to a submucosal leiomyoma. So histopathology is still 'gold standard' in differentiating between these conditions.

We present a rare pioneer case of uterine leiomyoma with calcereous degeneration in a HBsAg positive, post-menopausal woman.

**Case report:** A fifty years old; para 3, living 3, came to the Government medical college opd with the history of abdominal distension and pelvic pain for one year that rapidly increased over the past two months. Along with this she

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Received on: June 2015

Accepted after revision: July 2015

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had difficulty in passing urine. There was history of indigestion. No history of weight loss/ anorexia/ fever. She was menopausal since last three years. Examination: A middle aged lady of good build and nutrition. No pallor. BP 120/70 mm Hg, Pulse 90 per minute, RR 12 per minute. No significant lymphadenopathy. Systemic examination was normal. Abdomen was distended. A firm, smooth surfaced, regular, non-tender mass of approximately 32 weeks size was felt arising out of the pelvis. No shifting dullness was present. Speculum examination revealed normal cervix and vagina. Per vaginum examination cervix was firm, regular but deviated to the left side; uterus was increased in size, antverted, mobile and non-tender. Investigations : Hemoglobin 11.6 gm%, Blood Urea 24 mg/dl, Serum Creatinine 0.8 mg/dl, Random blood sugar 100 mg/dl, Na – 140 K – 4 Cl – 100 Tco2 – 25, Urine culture studies revealed no growth.

Ultrasonography of abdomen and pelvis revealed an anteverted bulky uterus, measuring 10.3x8.7x8.2 cms. A calcified intra-mural hypoechoic lesion with peripheral calcifications in left lateral wall of uterus, noted around the uterine cavity measuring 5.6x5 cms (Figure 1). Endometrium is normal with endometrial thickness of 3 mm. Ovaries are normal. No free fluid. Omentum was grossly normal. Rest of the abdominal organs were normal. Impression- Bulky uterus with calcified uterine fibroid. We received an uterus with unilateral adnexa (Fig 2a and 2b).

**Histopathology Report:** Uterus with chronic cervicitis, cystic atrophy of endometrium and corpora albicanta of the ovary. Also a calcified intra-mural leiomyoma of uterus is seen (Figure 3).

**Discussion:** Fibroids are innocuous estrogen dependent benign tumours occurring in the uterus. In a large majority of patients, fibroids are asymptomatic, being diagnosed incidentally

on USG. Only 20% to 50% of women with myoma are symptomatic.<sup>5</sup> While in most cases these are asymptomatic, patients may present with pelvic pain or a palpable pelvic/abdominal mass. Pelvic pain may be as a result of pressure effect on adjacent organs or a complicating torsion. This patient who was postmenopausal had a calcified fibroid which was causing pelvic pain.<sup>3</sup>

Most common degenerative changes in a postmenopausal fibroid are calcareous degeneration and sarcomatous degeneration. Calcareous changes in the leiomyomas are considered to be due to inadequate blood supply and depends on the degree and rapidity of the onset of vascular insufficient changes. A similar condition is found in calcified fibroma, in which the most extensive infiltration is not in the centre of the fibroid mass but in the outermost layer, and then it is proceeding towards the centre. The fibroid in our report had undergone calcific degeneration. There is no particular relationship between any symptom or group of symptoms and the incidence of degenerative changes.<sup>3-4</sup>

Benign uterine leiomyomas (fibroids) are common female pelvic tumor. Uterine sarcoma is rare. The likelihood of finding a sarcoma in a population of women with an intrauterine mass, some of whom have risk factors for uterine sarcomas, is approximately 0.1 to 0.28 percent.<sup>6</sup> The clinical manifestations are not useful to distinguish between leiomyomas and uterine sarcomas, since both typically present with abnormal uterine bleeding, pelvic pain/pressure, and a pelvic mass.

A rapidly enlarging uterine mass is not a reliable sign of a uterine sarcoma in women of reproductive age. After menopause, on the other hand, a new or growing uterine mass warrants further evaluation. Postmenopausal hormone therapy may cause an increase in the size of an

existing leiomyoma. Our patient did not have any such therapy or pre-diagnosed history.<sup>7</sup>

There is no pelvic imaging modality that can reliably differentiate between benign leiomyomas and uterine sarcomas. We suggest that women with a pelvic mass that is newly diagnosed or has changed markedly in size or mobility undergo a pelvic ultrasound as an initial imaging study rather than no imaging or imaging with another modality.<sup>8-9</sup>

Counseling of women with presumed uterine fibroids includes discussion of all available treatment options, including the risks and benefits of different surgical approaches. Appropriate assessment for endometrial carcinoma and uterine sarcoma should be performed, including evaluation for current disease and risk factors. The significant risk factors for uterine sarcoma (eg, postmenopausal status, history of  $\geq 2$  years of tamoxifen therapy, history of pelvic irradiation, history of childhood retinoblastoma, or personal history of hereditary leiomyomatosis and renal cell carcinoma [HLRCC] syndrome).<sup>10</sup>

**Conclusion:** The degenerated calcified uterine fibroid in a post-menopausal lady is rare in a known case of Hepatitis 'B' and needs more studies to know the incidence of such fibroid in this particular age group. Leiomyomas do not appear to progress to sarcoma, with the exception of rare atypical or cellular variants and histopathology is still the 'gold standard' in diagnosing this condition.

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**Figures:**



Figure 1: USG abdomen & pelvis-A calcified intra-mural hypoechoic lesion with peripheral calcifications in left lateral wall of uterus, noted around the uterine cavity measuring 5.6x5 cms.



Fig. 2a



Fig. 2b

Figure 2a: Gross picture- A bisected uterus with calcified fibroid.  
Figure 2b: Gross picture- Displaced endometrial cavity due to the calcified fibroid of uterus.

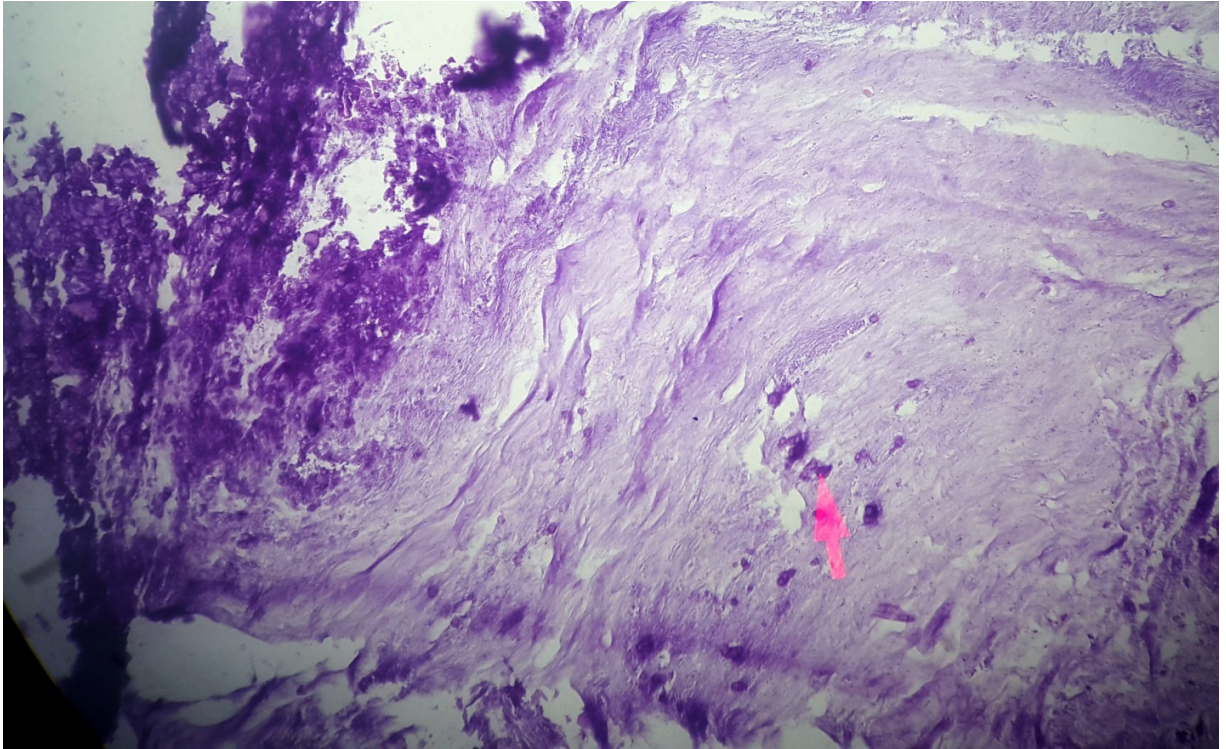


Figure 3: Microphotograph-Intra-mural leiomyoma of uterus showing areas of extensive calcification (extreme left) with minute microcalcifications (arrow) in a benign spindled smooth muscle tumour.