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A Case Report of Retroperitoneal Leiomyoma in a Hysterectomised Patient

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Abstract: ***Leiomyoma is common benign smooth muscle tumour of uterus usually affecting women of reproductive age group. Occurrence of leiomyoma after hysterectomy is very rare and very few cases are reported so far. We report a case of leiomyoma presenting as retroperitoneal tumour in a 40years old woman who had undergone myomectomy 20years back and subsequent hysterectomy for recurrent fibroid uterus 13years back. We are presenting this case for its rarity.***

Keywords: Retroperitoneal Tumour, Recurrent Leiomyoma, Hysterectomy

1. Case Report

A 40years old woman presented to NRIGeneral Hospital, Chinakakani with a complaint of mass per abdomen of 4 months duration with bladder and bowel disturbances manifested as increased frequency of micturition and increased frequency of stools.

Patient was $P_3L_2D_1$ with history of two previous caesarean sections. She underwent myomectomy 20years back & hysterectomy 13years ago for recurrent and symptomatic fibroid uterus. Not known regarding removal of ovaries.

On Examination

General condition -fair
Abdominal examination revealeda 22 weeks size nodular, firm nontender mass
Per Speculum examination – Vault healthy
Per Vaginal examination – 22weeks size nodular mass felt
Per Rectal examination - Same mass felt & rectal mucosa free.

Aprovisional diagnosis of ovarian cyst was made and USG was taken for confirmation. USG report showed it as mixed echogenic mass lesion measuring 17.6 x 10. 8cm seen in the pelvis extending into abdomen.Both ovaries not separately visualised. Bilateral mild hydronephrosis was noted. CA-125 level - 9.66 IU/dl. She was advisedCT scan, but patient was not affordable. She was posted for laparotomy.

Anaesthesia: Spinal + Epidural

Incision: Abdomen opened in layers with midline verticalincision.

2. LaparotomyFindings

A solid mass of 15 x 12cm with irregular nodular surface without any breach over the surface present in the pelvis predominantly occupying the retroperitoneal area.Large intestine with mesentery crossing over the middle part of the mass.Flimsy to dense adhesions predominantly in the posterior surface of mass present.Left ureter is displaced to right lateral aspect of the mass.

Both sides ovaries absent. The omental tissue and the entire mass which were removed were sent for histopathological examination (HPE).

Cut Section of the tumour showed partly solid and cystic areas.

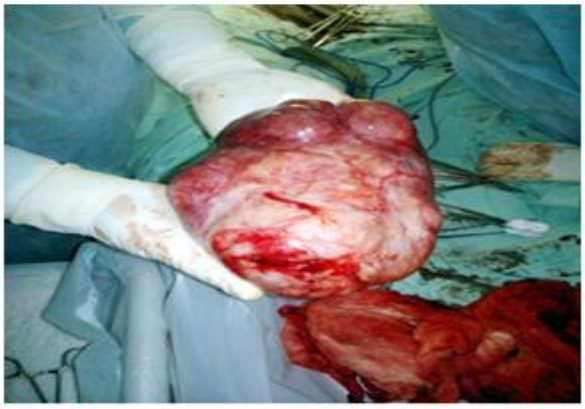

Fig 1: Specimen of Leiomyoma after excision

HPE Reportof the specimen showed leiomyoma with changes of cystic and hyaline degeneration. No evidence of malignancy. Omental pad of fat showed no evidence of tumour.

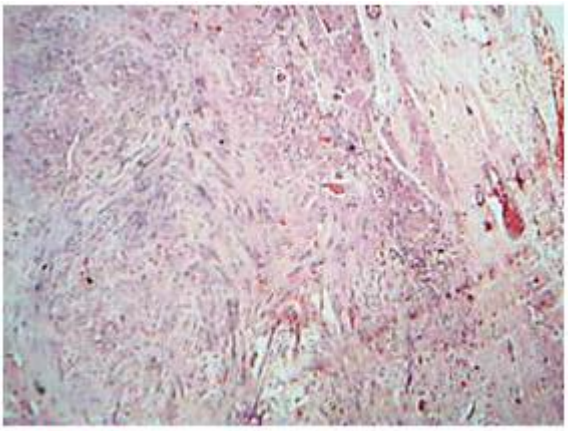

Fig 2: H&E x10 showing spindle cells arranged in fasciular growth pattern

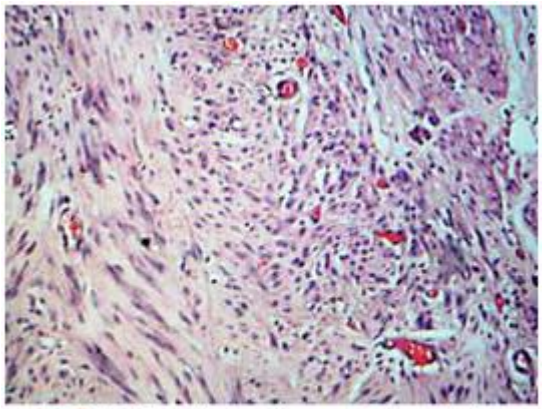

Fig 3: H&E x40 showing spindle cells in fasciular growth pattern with areas of hyalinization

Immunohistochemistry (IHC) report showed that the tumour is negative for CD117 and positive for Smooth Muscle Actin (SMA) in all tumour cells thus excluding gastro intestinal stromal tumour (GIST) and confirming leiomyoma.

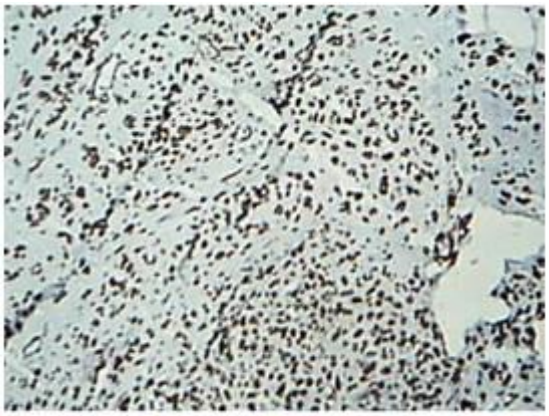

Fig 4: IHC SMA positive in spindle cells

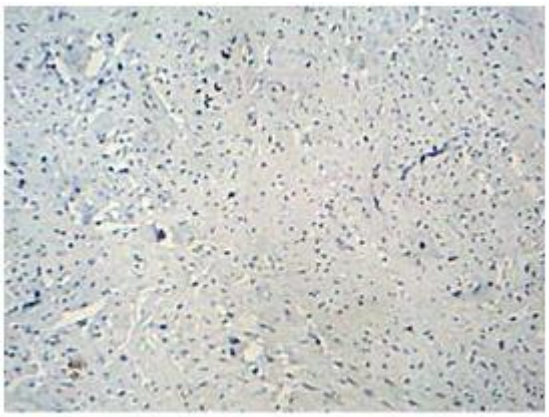

Fig 5: IHC CD 117 Neagtive in spindle cells

3. Discussion

Although uterine leiomyomas are very common, posthysterectomy leiomyomas are very rare. The first description of benign metastasizing leiomyomatosis was by Steiner in 1939[1]. The reported mean time taken for the initial uterine leiomyoma and appearanceof distant metastasis is 10years[2]. The pathogenesis of benign metastasizing leiomyoma is controversial. The postulated theories include;

Smooth muscle metaplasia of the subperitoneal mesenchyme,lymphovascularembolisation seeding from ruptured leiomyomas and true metastasis from low grade leiomyosarcoma of uterus[1].

In two cases reported by Rakesh Sinhaet al[3] recurrent leiomyomas appeared after hysterectomy but in those cases oophorectomy was not done during hysterectomy. So they thought that this could be a causal factor. But in our case leiomyomas occurred after bilateral oophorectomy.Rajab et al described a case of disseminated leiomyomatosisperitoneii after TAH + BSO in a 66years old patient.

Another possible cause for post hysterectomy myomas could be retained fragments after laparoscopic hysterectomy due to retrieval of the specimen by morcellators. But in our case leiomyoma recurred following open laparotomy with TAH + BSO.

Leiomyoma metastases to retroperitoneal lymphnodes, leiomyoma of urinary bladder, intravenous leiomyomatosis and leiomyomatosisperitonealisdisseminata should be considered in the differential diagnosis of metastasizing leiomyoma to retroperitoneal soft tissues[2].

Most of retroperitoneal leiomyomas have same histological features of uterine leiomyomas[4, 5]. A systematic literature review of 105 cases of retroperitoneal leiomyoma was done by Poliquinet al[6]. Very often preoperative diagnosis was made wrongly even with diagnostic imaging. More than 40% of patients had hysterectomy for fibroid uterus orthey had concurrent leiomyoma of uterus.

In a case report presented by P. Dursumet al[7] retroperitoneal leiomyomatosis was diagnosed by preoperative ultrasonographyguided fine needle biopsy.

Retroperitoneal leiomyoma should be differentiated from leiomyosarcoma& gastrointestinal stromal tumour (GIST).

Retroperitoneal leiomyomas may be completely asymptomatic or may cause symptoms ranging from abdominal pain to hydronephrosis due to ureteric obstruction. For both diagnosis and treatment exploratory laparotomy followed by removal of the tumour isrequired. Surgical exploration followed by histopathological confirmation is mandatory for the definite diagnosis.

4. Conclusion

Recurrent benignleiomyomas after hysterectomy is a rare occurrence. Usually these myomas develop in patients who undergo hysterectomy for leiomyomas only. This case was diagnosed as ovarian tumour before laparotomy as ovarian status was not known at that time (whether BSO done or not). We could make out the diagnosis of retroperitoneal tumour only during laparotomy. We suggest that even though recurrent leiomyoma is a rare entity it also should be considered in the differential diagnosis of mass per abdomen in a hysterectomised patient especially who had undergone hysterectomy for fibroid uterus. Diagnosis should be confirmed only after histopathological examination of surgically removed specimen.

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