When uterine fibroid occurs in its usual site, presentation, diagnosis and management are straightforward. When it exists in unusual area, the diagnosis becomes challenging. Parasitic leiomyoma is an extremely rare disease. Their unusual growth pattern may even mimic malignancy and can result in clinical dilemma. A 42 years old female with complaints of lump in abdomen since 4 years and amenorrhoea since 3 months, was having USG and CT scan findings consistent with heterogeneous mass arising from uterus. Intraoperatively, peritoneal soft tissue tumour was found and HPE confirmed the diagnosis of parasitic leiomyoma.

**Keywords:** Leiomyoma, Paratoneum, Myomectomy, Fibroid.
USG image showing the relation of the uterus and the mass

Intra-operative picture while dissecting and excising the mass

Whorled pattern of smooth muscle bundle separated by well vascularized connective tissue (white arrow)

**DISCUSSION**

Uterine fibroids are the most common benign pelvic tumors in women and are present in about 80% of all hysterectomy specimens [5]. The most common sites for fibroid are uterus and gastrointestinal tract. However, they are known to originate from wherever smooth muscle cells exist [6]. Whether smooth muscle cells in vessels of anterior abdominal wall and peritoneum react to the extraneous hormonal stimulation to form leiomyoma is yet to be explained. The term Parasitic Leiomyoma was first coined by Kelly and Cullen in 1909 and they could either be:

1. Primary or spontaneous, explained as pedunculated subserosal fibroid which develops a long stalk, outgrowing their uterine blood supply and subsequently receiving blood supply from other sources or
2. Secondary or iatrogenic, seeding a portion of the fibroid during morcellation and leaving
behind a small fragment that implants to the normal tissue anywhere in the peritoneum [7, 8].

In a study by Kho and Nezhat, twelve cases were studied and they reported 83% of patients had prior abdominal surgery and 67% patients had prior myomectomy [9].

Our patient did not have any prior surgical history and we wished to hypothesize that the leiomyoma was one of the parasitic wondering varieties. With the setting of multiple fibroids in this patient’s uterus, we could also conclude that this was a parasitic fibroid rather than a de novo leiomyoma arising in non Mullerian smooth muscle of the peritoneal cavity or abdominal wall. Our case reiterates the important fact that parasitic leiomyomas present with diagnostic dilemmas for even astute clinician as they often masquerade as adnexal masses.

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