A rare case of a right inguinal hernia containing a round ligament leiomyoma

Kelly Fening, DO; Chinh Pham, MD

UPMC Central Pennsylvania; Harrisburg, PA

UPMC LIFE CHANGING MEDICINE

INTRODUCTION

Leiomyomas, or uterine fibroids, are the most common benign tumors in women of reproductive age and are the leading indication for hysterectomy in the United States. Round ligament leiomyomas, on the other hand, are rare. This case details a patient who presented with symptomatic uterine fibroids as well as a large, incarcerated right groin mass that appeared to be a round ligament leiomyoma on preoperative imaging.

CASE DESCRIPTION

52-year-old female with a history of symptomatic uterine fibroids as well as a large right groin round ligament leiomyoma presented for elective surgical intervention. She underwent a robotic assisted hysterectomy at which time she was noted to have an almost 18-week size multilobular fibroid uterus. Following the hysterectomy, general surgery excised a 12 x 8 cm right round ligament inguinal mass fibroid that was found to extend through the inguinal floor. After removal of the mass, an extra-large mesh plug perfix was used to bridge the defect. This was secured to the muscle medially, inferiorly to the shelving edge of the inguinal ligament, and superiorly to the external oblique muscle. The external oblique aponeurosis, scarpa's fascia, and the subcutaneous tissues were sequentially approximated. She was discharged home on post operative day 1. Final pathology revealed multiple leiomyomas.

DISCUSSION

The most common round ligament tumors are leiomyomas, endometriosis, and mesothelial cysts[1]. Round ligament leiomyomas are rare, with only 21 documented cases reported between January 1, 2000 and March 1, 2022[2]. The majority of patients are asymptomatic; however, when presenting with symptoms the most common is abdominal pain. The symptoms can vary based on location, size, and growth rate. Approximately 66% of leiomyomas are in the extraperitoneal region which involves the vulva and inguinal areas. The masses are typically discovered incidentally during physical exam or on abdominal imaging to evaluate for other pathology. Diagnostic modalities include ultrasound, CT and MRI. Ultrasound can be particularly helpful in diagnosing these lesions which will appear as a vascular connection between the uterus and the leiomyoma. MRI is useful in distinguishing between benign and malignant pelvic masses. Management of these leiomyomas can be via an open or minimally invasive method, depending on the location of the mass. Our patient's inguinal leiomyoma was resected via an open approach given its large size and non-reducible nature.

CONCLUSION

Leiomyomas are common and typically occur in the uterine body. Round ligament leiomyomas are rare and can occasionally present as a large inguinal hernia. Imaging can help to distinguish between leiomyomas and other pelvic pathologies. Patients typically have favorable outcomes and improvement in their symptoms after resection of the mass.

REFERENCES

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