

Abstract Purpose

The purpose of this case study is to investigate the interesting complications that may arise from uterine Leiomyomas. Uterine Leiomyomas are extremely common in the female population with a strong genetic role that plays part in the chance of development.

The common complications of leiomyomas are: chronic pelvic pain, heavy menstrual bleeding, anemia, poor pregnancy outcomes, infertility, constipation, urinary tract infections, incontinence, torsion, and degeneration (with or without infection).

In this case a 54 year old female patient presents to the emergency department accompanied by family for chief complaint of heart palpitations unknown chronicity. The patient has a history of 1x episode of idiopathic DVT anti coagulated with heparin in the past, has no other cardiac history, has history of an established, stable, large, partially calcified uterine leiomyoma which has decreased in size 30% since the patient has become post menopausal. Initial blood work does not show any abnormalities, d-dimer is not elevated. Patient's vitals are within normal range at the time of exam.

Materials and Methods

Amongst other diagnostic testing, Ct Abdomen/Pelvis was ordered to evaluate stability of known mass, bleeds, or infectious/inflammatory etiology (patient had later disclosed of feint abdominal pain and there was history of uterine mass).

Subsequent MRI imagine was ordered to further evaluate initial findings.

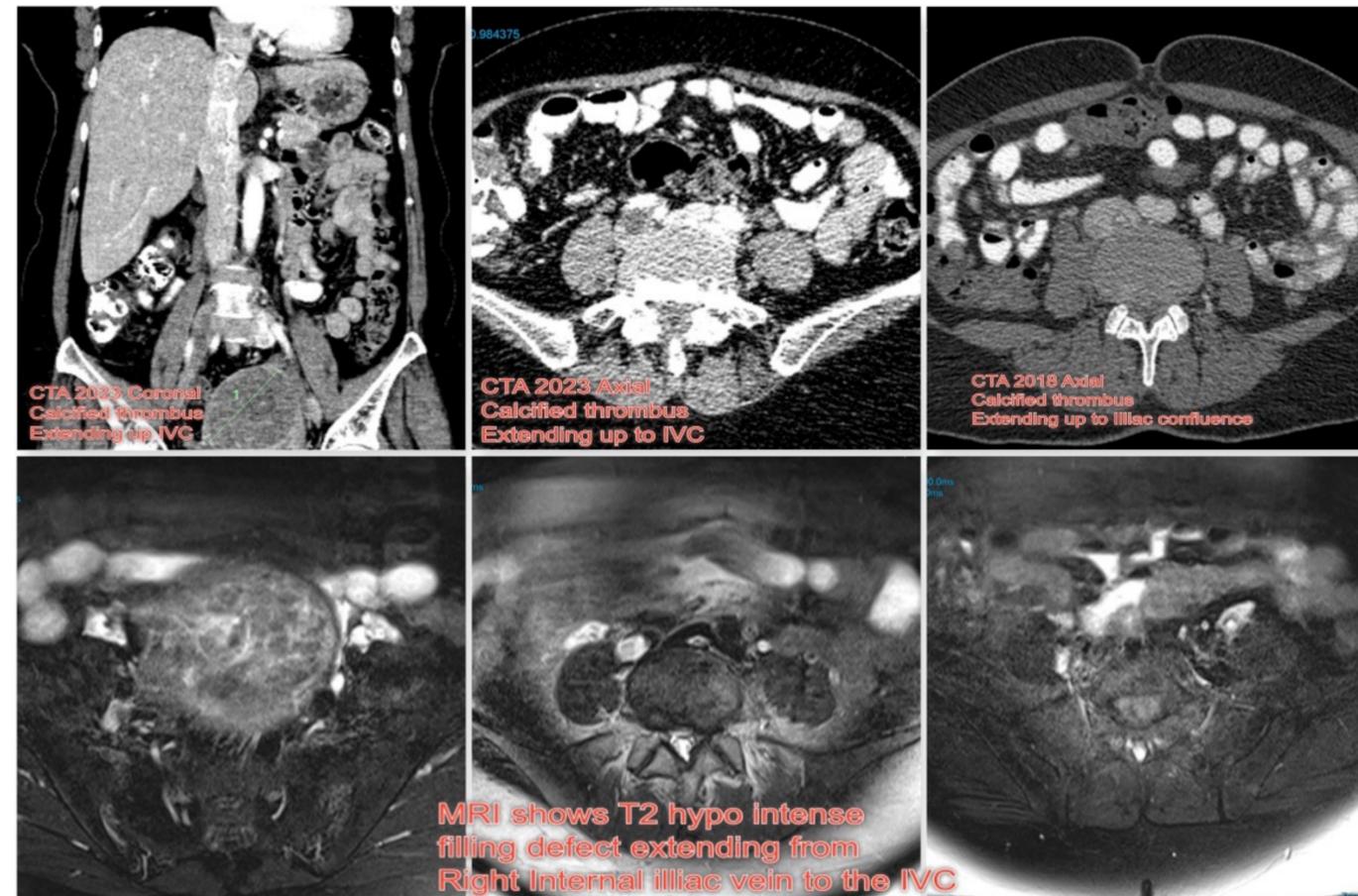
Retrospective evaluation of previous out of network imaging for comparison to current imaging was completed.

Results

The contrast CT shows a large filling defect within the internal iliac vein on the right extending to the right iliac confluence, into the IVC where it shows a large dependently layering filling defect with calcified components extending up to the Cavo-Atrial junction.

Subsequent T2 MRI confirms that this is likely a T2 dark filling defect representing a thrombus which is extending into the right iliac vein confluence and further propagating into the IVC.

Retrospective review of previous out of network images demonstrated a prior CTA performed for stability of the uterine leiomyoma showed that there was a filling defect within the right internal iliac vein and confluence that had not yet extended into the IVC.



Conclusion

A case which initially presented itself as a female complaining of heart palpitations resulted in a unique finding of uterine leiomyoma extending through the local vasculature in a cephalad vector into the Cavo-Atrial junction. This outgrowth of smooth muscle and calcification may have been a focus for ectopic pacing beats that may have ultimately manifested the patient's symptoms. The patient was subsequently referred to vascular surgery.

Post evaluation it was decided that the patient was an appropriate candidate for two stage excision with open IVC and iliac vein thrombectomy. Since the patient is post menopausal and the leiomyoma is estrogen sensitive this case was not scheduled as emergent, was later scheduled as outpatient. The patient was placed on Letrozole (aromatase inhibitor) to prevent progression in the interim (since data has shown that these masses are estrogen responsive).

References

Georgetown University Hospital Department of Radiology, J. S. (2010, September 9). *Outcomes from leiomyoma therapies: Comparison with normal... : Obstetrics & Gynecology*. LWW. Retrieved April 23, 2023, from <https://journals.lww.com/greenjournal/Abstract/2010/09000/Outcomes From Leiomyoma Therapies Comparison With.14.aspx>