

## ARP Case Report N° 13: Torsion with Infarct of Pedunculated Subserous Uterine Myoma

*Caso Clínico ARP N°13: Torção com Enfarte de Mioma Pediculado*

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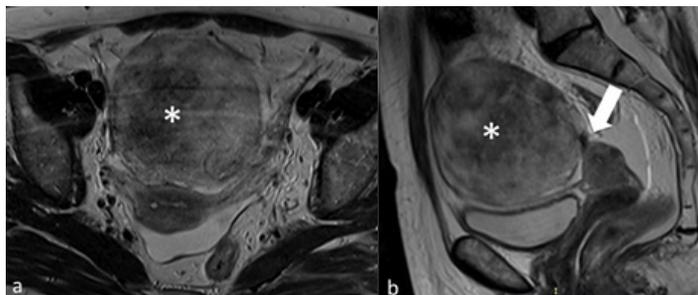
### Clinical Case

A 73-year-old woman consulted the gynecologist for persistent pelvic pain for the past month. No other complaints including systemic symptoms or metrorrhagia.

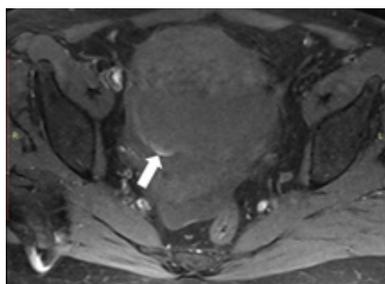
The ultrasound study showed a large pelvic tumour mass. It was not possible to determine the organ of origin. Values of Ca- 125 were normal.

Pelvic MRI was requested for additional characterization of the pelvic mass and to determine the organ of origin.

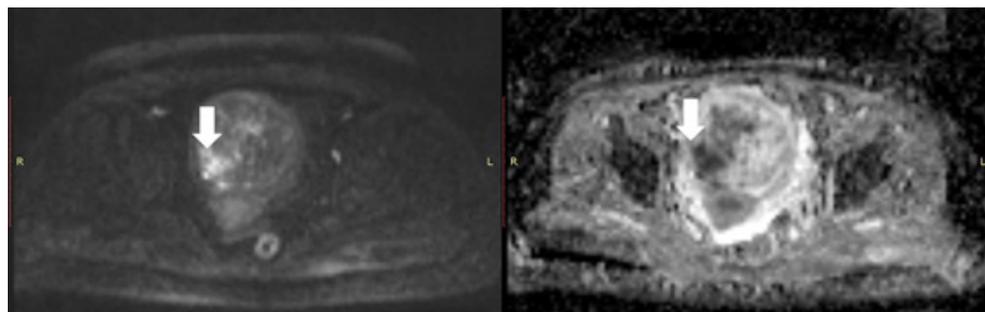
Magnetic resonance imaging revealed a well-defined solid tumour lesion located in the midline independent of the ovaries and bladder but contacting the uterine fundus by a small pedicle. The mass reveals blood inside and there was no enhancement after IV contrast. The findings suggest the diagnosis of torsion on pedunculated subserous uterine myoma with infarction.



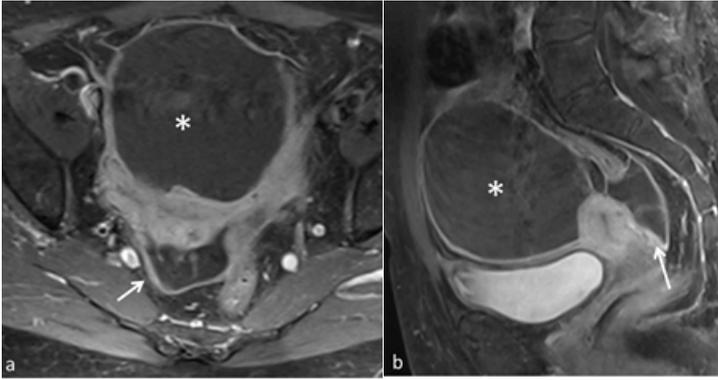
**Figure 1** - Axial T2 (a) shows a large tumour mass with a heterogeneous, predominantly high SI located in the midline anterior to the uterine body and superior to the bladder (asterisk). This lesion is independent of the ovaries, which are difficult to identify due to their atrophy. However, in the sagittal plane (b) a discrete hypo-intense pedicle is identified joining the mass to the uterine fundus (arrow) making it the organ of origin of the mass.



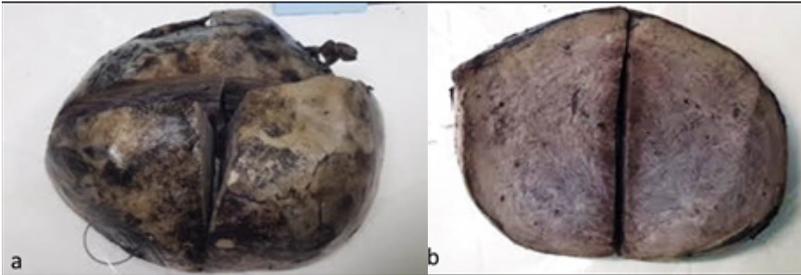
**Figure 2** - Axial T1 with fat saturation reveals in the mass the presence of a linear high-SI area (arrow) consistent with the presence of blood. This finding correlates with the finding at DWI (figure 3).



**Figure 3** - DWI ( $b$ -value 1000s /  $\text{mm}^2$ ) reveals high SI with corresponding hypo SI at the ADC map (arrow). This change is due to the presence of blood as identified in the T1 sequence with fat saturation.



**Figure 4** - Fat sat axial (a) and sagittal T1 (b) after IV contrast. The mass does not reveal any enhancement (asterisk) and it is associated to the small amount of free fluid in the cul-de-sac (arrow).



**Figure 5** - The macroscopic specimen shows the solid tumour lesion, well delimited to the cut with swirling aspect resulting from smooth muscle fibres and with a purple tone resulting from the infarct.

## Discussion

Uterine myomas are very common and usually subclinical benign tumours. When symptomatic the most frequent complaints are pelvic pain, menometrorrhagia, dysmenorrhea, dyspareunia and urinary frequency. They are sometimes associated with acute complications, the most frequent being the acute pain resulting from tumour degeneration and acute torsion with infarction, but this is rare, and its exact incidence is not known. However,

early diagnosis is important since tumour ischemia and gangrene may result in tumour over-infection with consequent peritonitis.

Although the preoperative diagnosis of this complication is difficult a previous history of subserous myoma associated with the imaging findings of a solid pelvic mass of “fibroid aspect” in the T2 sequences, lying against the uterus, independent of the ovaries and other pelvic organs with or without blood inside and without contrast enhancement should suggest the diagnosis.