

## Case Report

# Degenerative Cervical Leiomyoma Resembling Malignant Leiomyosarcoma

Marieke C. Punt<sup>1</sup>, Trudy G.N. Jonges<sup>2</sup>, Manon N. Braat<sup>3</sup>, Kartika Hapsari<sup>4</sup>, Henk W.R. Schreuder<sup>1,4\*</sup>

<sup>1</sup>Department of Gynecology and Reproductive Medicine, Division of Woman and Baby, University Medical Center Utrecht, Netherlands

<sup>2</sup>Department of Pathology, University Medical Center Utrecht, Netherlands

<sup>3</sup>Department of Radiology, University Medical Center Utrecht, Netherlands

<sup>4</sup>Department of Gynecologic Oncology, UMC Utrecht Cancer Center, University Medical Centre Utrecht, Netherlands

**\*Corresponding author:** Henk W.R. Schreuder, Department of Gynecologic Oncology, UMC Utrecht Cancer Center, University Medical Centre Utrecht, PO box 85500, 3508 GA Utrecht, The Netherlands. Tel: +310887556446; Email: H.W.R.Schreuder@umcutrecht.nl

**Citation:** Punt MC, Jonges TGN, Braat MN, Hapsari K, Schreuder HWR (2018) Degenerative Cervical Leiomyoma Resembling Malignant Leiomyosarcoma. J Surg: JSUR-1112. DOI: 10.29011/2575-9760.001112

**Received Date:** 04 March, 2018; **Accepted Date:** 25 April, 2018; **Published Date:** 30 April, 2018

## Case Report

A 65-year-old woman with no significant medical history, other than a conisation of the cervix with unknown pathology in 1986, presented to the Department of Gynecology with complaints of acute abdominal pain and mucous vaginal discharge. Since, 2 weeks she has smelly, yellow discharge and loss of energy. Abdominal examination revealed normal bowel sounds and no significant palpable mass. Bi-manual vaginal Examination Under Anesthesia (EUA) demonstrated a large (10 cm) round, elastic mass in the vagina and douglas pouch. There was no palpable or visibly of the cervix and it was not possible to perform a hysteroscopy or dilatation and curettage. Parametria and uterosacral ligament did not appear to be infiltrated. Specimens, vaginal culture and vaginal/cervical cytology revealed no malignant cells, yet a nonspecific purulent infection was seen. Blood tests demonstrated elevated leucocytes of 29 x109/L (normal reference 10 x109/L, C-Reactive Protein (CRP) of 112 mg/L (normal < 2 mg/L) and tumor marker CA-125 of 69 U/mL (normal <35 U/mL). Other tumor markers were within the normal range (CA-15.3, CA-19.9 and CEA). CT-scan of the abdomen revealed a large mass (10.6 cm x 10.9 cm x 12.0 cm). This process likely originated from the cervix or proximal part of the corpus of the uterus, and was suspect for a malignant leiomyosarcoma or leiomyoma with degenerative changes. [1,2] Para-aortic and iliac heterogeneous/necrotic lymphadenopathy (10 and 13 mm respectively) was found. Since there was suspicion of a malignant leiomyosarcoma the patient was referred to the University Hospital. An additional pelvic MRI showed an infectious and necrotizing cervical

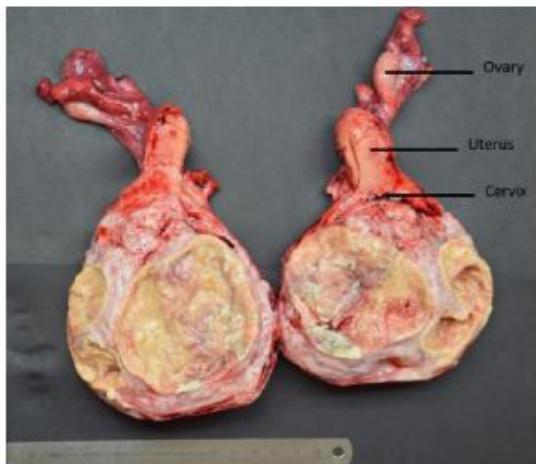
mass protruding from the myometrium as well (Figure 1).



**Figure 1:** MRI-scan: A sagittal T2-weighted view showing a pedunculated mass extending from the myometrium (arrow) and protruding into the vagina via a seemingly completely effaced cervix.

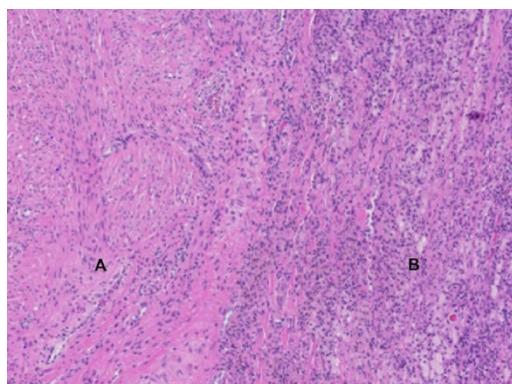
Enlarged, heterogeneous, possibly necrotic obturator, common iliac and para-aortic lymph nodes, up to the level of the renal veins were seen. The differentiation between an infectious mass or a malignant mass could not be made on radiology alone. However, the suspicion of a malignant mass reduced after the MRI. The enlarged lymph nodes fit in both diagnosis. Treatment: a median laparotomy was performed. There was no ascites and peritoneal washings were taken. A hysterectomy with bilateral salpingo-oophorectomy and excision of an enlarged lymph node

was performed. At pathology the uterus was cut in half and several purulent necrotizing areas were found. (Figure 2). Final tissue cultures did not show any bacteria. Cytology washings showed no malignant cells.



**Figure 2:** Macroscopic findings: Multiple infectious and necrotic pockets within the mass.

Histopathologic examination showed clearly a 13-cm leiomyoma with extensive infection and multiple degenerative/necrotic parts. There was no need to perform immunohistochemical examination. There were no signs of malignancy (Figure 3).



**Figure 3:** Microscopic view: extensive influx of the inflammatory cells. A) smooth muscle cells and B) inflammatory cells (Hematoxylin (HE) 250x).

In addition, an endometritis with pyometra was found. The enlarged lymph node showed reactive changes without any malignant cells. The woman recovered quickly, and no further follow-up was needed.

## Learning Points

- Differentiation between a leiomyoma with degenerative changes and a leiomyosarcoma can be difficult, MRI is preferred over CT.
- A degenerative leiomyoma can present with large, heterogeneous lymphadenopathy.
- Degenerative leiomyoma can occur years after menopause.
- It's very important to reduce the time of uncertainty for a patient to a minimum.

## Patient Perspective

The most debilitating effect of the initial diagnosis (possibly cancer) just weeks before the day I would go into retirement, was the total reorientation of our future lives that this seemed to imply for my husband and myself; we had really looked forward to our lives as retirees and those now appeared to be potentially very short-lived ones. All of that lies behind me now, but the memory will undoubtedly stay. I appreciate the professionalism, starting from the local hospital in my home town up to and including the UMC Utrecht. The time waiting for the final pathology results was initially too long and we had asked the hospital to get the results before the weekend. This was unpleasant and gave us a lot of extra distress. It's very important to reduce the time of uncertainty for a patient to a minimum.

## References

1. Arleo EK, Schwartz PE, Hui P, McCarthy S (2015) Review of Leiomyoma Variants. *American Journal of Roentgenology* 205: 912-921.
2. Alp PP, Tse KY, Tam KF (2010) Uterine smooth muscle tumors other than the ordinary leiomyomas and leiomyosarcomas: a review of selected variants with emphasis on recent advances and unusual morphology that may cause concern for malignancy. *Anat Pathol* 17: 91-112.