

Hysteroscopic Resection of Cervical Nerve Sheath Tumor

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ABSTRACT

Isolated nerve sheath tumors of the uterine cervix are very rare entities. This is especially true for benign nerve sheath tumors. We present, to the best of our knowledge, the first case of a benign nerve sheath tumor resected hysteroscopically. Our patient is a 69 year-old white female with a history of post menopausal bleeding. Initial workup included an endometrial biopsy and an ultrasound. A 4 cm cervical mass was identified on that study.

Further characterization of the mass was obtained with magnetic resonance imaging (MRI). Gynecologic-Oncology consultation was obtained, and the opinion was that this was a cervical myoma. The patient continued to have bleeding and was taken to the operating room for a hysteroscopy and dilatation and curettage. At surgery, a large cervical mass was resected hysteroscopically. Final pathology report showed this to be a benign nerve sheath tumor.

Key Words: Nerve sheath tumor, Operative hysteroscopy.

INTRODUCTION

Involvement of the uterine cervix by nerve sheath tumors, particularly benign nerve sheath tumors, is very uncommon. Such masses are difficult to diagnose as this is an unusual finding. We present, to the best of our knowledge, the first case of a benign nerve sheath tumor resected hysteroscopically.

CASE REPORT

A 69 year-old white female presented for evaluation of post menopausal bleeding. The patient had been bleeding for one week prior to presentation. She had no prior history of post menopausal bleeding and was not on any hormone therapy.

Initial evaluation consisted of an endometrial biopsy, which showed inactive endometrium and blood. Due to morbid obesity, the pelvic exam was suboptimal, and a pelvic ultrasound was ordered. The ultrasound findings showed a 4 cm cervical mass, the etiology of which was uncertain, as well as endometrial stripe thickening (**Figure 1**). Magnetic resonance imaging (MRI) of the pelvis was then obtained for further characterization. The MRI showed a large cervical mass, which was felt to be suspicious for malignancy (**Figure 2, 3**). She then had a consultation with the Gynecologic-Oncology division who felt that this was most likely a cervical myoma and recommended no further intervention.

The patient then returned with further, heavier vaginal bleeding and was taken to the operating room for a dilatation and curettage with hysteroscopy. At surgery, the uterine cavity sounded to a depth of 7 centimeters. Upon hysteroscopically inspecting the cavity, multiple small fundal polyps were noted, as well as what appeared to be a large cervical myoma (**Figure 4, 5**). The continuous flow resectoscope was used to resect the pathology found (**Figure 6**). Blood loss and fluid deficit were minimal. The patient had an uneventful initial postoperative course.

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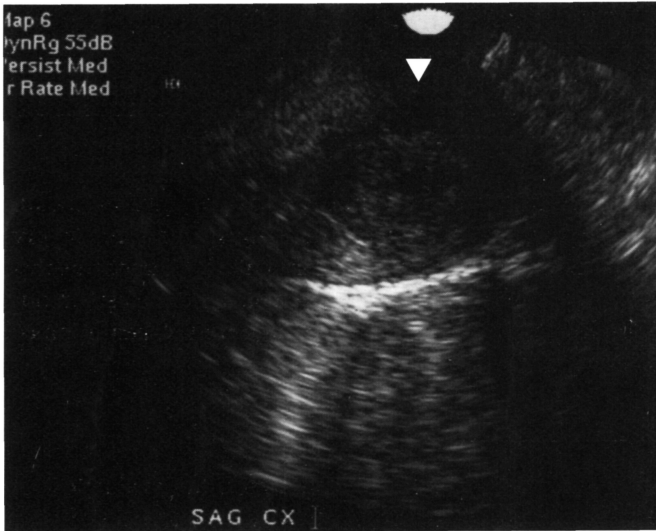


Figure 1. Sonographic view of cervical mass (arrow).

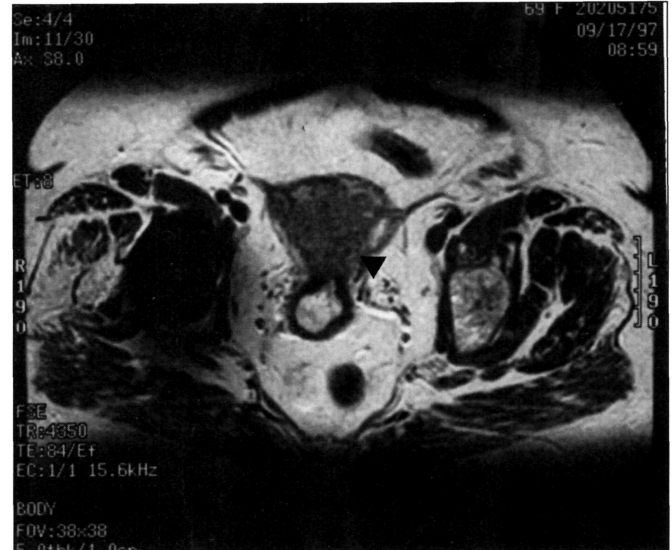


Figure 2. Coronal (A) MRI view of cervical mass.

PATHOLOGY

Pathology of the endometrial polyp showed a hyperplastic polyp without atypia. The cervical mass showed a sharply circumscribed tumor of low cellular density partially covered on its surfaces by stretched-out endocervical epithelium. The pattern had a neural appearance with intertwining bundles of stroma with widely spaced spindle cells with elongated nuclei, many with a wavy S-shaped pattern commonly seen in neural sheath tumors. The individual cells did not show any significant pleomorphism and no mitotic activity. The overall appearance was that of a benign nerve sheath tumor.

DISCUSSION

Nerve sheath tumors of the uterine cervix appear to be a very rare entity. It is clinically difficult to distinguish them from myomas. Tumors that are part of a more generalized condition may be neurofibromas.^{1,2} Other masses may exhibit characteristics that identify them as primary malignant Schwannomas. These are more frequently found in the extremities, the head and neck region, the trunk, and the paravertebral areas.³ Certain light and electron microscopic findings,⁴ as well as the use of special stains, can confirm the suspected diagnosis.

Management of these masses will vary depending on the



Figure 3. Sagittal MRI views of cervical mass.

patient, the suspected preoperative diagnosis, and the endoscopic expertise of the surgeon. Hysteroscopic resection can be accomplished safely in the outpatient setting, eliminating the need for hysterectomy.



Figure 4. Hysteroscopic view of cervical mass.



Figure 6. Gross appearance of hysteroscopically removed mass.



Figure 5. Cervical mass attachment to the endometrial cavity.

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