

RETROPERITONEAL SCHWANNOMA MIMICKING UTERINE MYOMA

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SUMMARY

Objective: Schwannomas rarely present as pelvic masses. Most of them have been previously examined in the pelvis, vagina, retroperitoneum, and mediastinum. We report a 44-year-old woman with a pelvic mass initially diagnosed as a uterine fibroid but subsequently proven to be a retroperitoneal cellular schwannoma.

Case Report: Histologic examination revealed the mass to be an Antoni A-dominated tumor that was S-100-positive, CD117-negative, and smooth muscle actin-negative. The patient underwent a total hysterectomy and removal of the tumor, and had no evidence of recurrence at 2 years' follow-up.

Conclusion: In this case, the treatment of choice was complete excision of the tumor, which was considered to be curative. [*Taiwan J Obstet Gynecol* 2009;48(2):176–177]

Key Words: cellular schwannoma, pelvic mass, retroperitoneal, uterine myoma

Introduction

Schwannomas rarely present as solitary masses in the retroperitoneum. They have been reported to develop from the retroperitoneal cavity in only 3% of cases [1]. Schwannomas are usually asymptomatic and, because they are located in deep tissue, they are difficult to diagnose at an early stage.

Case Report

The patient was a 44-year-old, gravida 5, para 3, abortus 2, woman, 161 cm tall and weighing 90 kg. She had undergone three cesarean sections. She had a several-year history of a left lower abdominal palpable, painless mass, with no genitourinary or gastrointestinal symptoms. The results of an ultrasonographic

examination revealed a left anterior uterine mass measuring 75 × 50 × 74 mm in size which was diagnosed as a uterine myoma. Total abdominal hysterectomy was scheduled.

During the operation, the mass was excised and was found to be firm, solid and well-capsulated, measuring 80 × 50 × 60 mm. The mass adhered to the bladder serosa and was closed but not connected to the uterus. A total hysterectomy was performed because of the presence of multiple small uterine fibroids. The patient was discharged on the sixth postoperative day. She had no evidence of recurrence up to 2 years' follow-up.

Histologic examination of the excised mass showed a spindle cell tumor with marked foamy cell infiltration (Figure 1). An Antoni A-dominated and hyalinized tumor vascular structure was observed. Lipid-laden histiocytes with interlaced, whirling spindle cells were also noted. Necrotic areas were rarely observed, and most cellular regions demonstrated obvious afibrillar cytoplasm. The immunohistochemical staining was positive for S-100 (Figure 2) and negative for both CD117 and smooth muscle actin. The final pathologic diagnosis of the tumor was a cellular schwannoma, located in the retroperitoneum.



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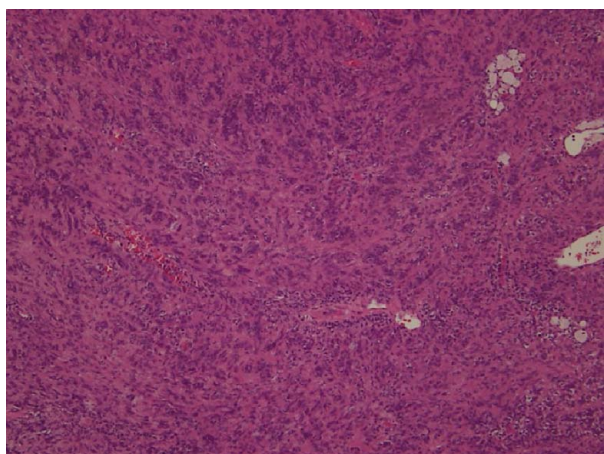


Figure 1. Hematoxylin and eosin staining of a paraffin-embedded section of the tumor (original magnification $\times 100$). A typical, Antoni A tissue pattern composed of hypercellular spindle cells arranged in sheets and a fascicular pattern with large cell size.

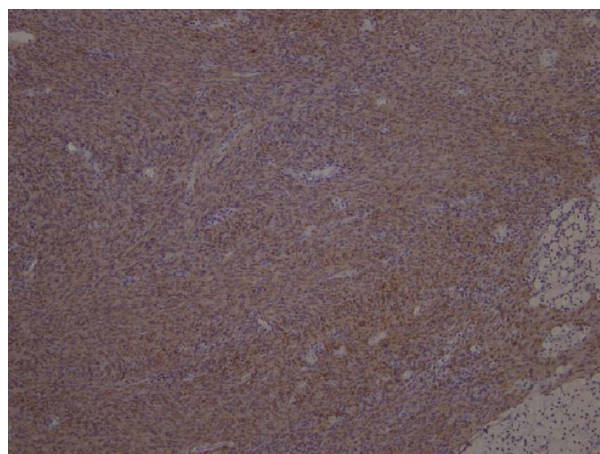


Figure 2. Immunostaining of a tumor section (S-100 blotted with hematoxylin counterstaining, original magnification $\times 100$). The tumor cells were positive for S-100 expression (brown-red color). A typical, Antoni A tissue pattern composed of hypercellular spindle cells arranged in sheets and a fascicular pattern with large cell size was also noted.

Discussion

In 1932, Masson termed a tumor originating from Schwann cells as a schwannoma. However, reports have indicated that schwannomas can occur anywhere in the nerve sheath of peripheral nerve cells [1]. The characteristics of a schwannoma include the presence of S-100 and a mainly hypercellular Antoni A region, with unusual mitotic figures. The pathologic sections of the mass in this patient revealed a highly cellular schwannoma tissue showing exclusively Antoni A features, with mitotic figures in 1–4 per 10 high-power fields. Immunostaining findings were S-100-positive, CD117-negative, and smooth muscle actin-negative, which were also suggestive of its neural origin. The mass was finally diagnosed as a cellular schwannoma, located in the retroperitoneum.

Surgical resection has been reported to be suitable for the treatment of schwannomas [2]. Most cases are

benign, although malignant tumors have occasionally been reported. Despite incomplete resection of the tumor, the risk of recurrence and metastasis is considered to be low. The tumor has a recurrence rate of 5–10%, but metastasis has not been reported [3]. In our case, the treatment of choice was complete excision of the tumor. The prognosis was good, and excision was considered to be curative in this case.

References

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