RETROPERITONEAL NEURILEMMOMA: A CASE REPORT

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ABSTRACT

Neurilemmoma is a rare retroperitoneal tumor. A case of retroperitoneal neurilemmoma was reported from Trang Hospital, diagnosed by CT as a mass located at the pelvic brim right side. A 41 years old female patient was admitted because of a palpable abdominal mass with referred pain into her right lateral thigh on compression. CT revealed a rim enhancing mass with central hypodensity. After surgical removal, histopathological examination confirmed a neurilemmoma.

Key words : retroperitoneal neoplasms, neurilemmoma

INTRODUCTION

Neurilemmomas, or schwannomas, are benign neurogenic tumors that arise from the nerve sheaths of peripheral nerves. They may occur nearly anywhere in the body but have a predilection for the head, the neck, and the flexor surfaces of the upper and lower extremities. The retroperitoneal localization of a neurilemmoma represents an unusual occurrence (0.5%-1.2% of all sites).[1,2]

In the present report, I describe a case of this uncommon retroperitoneal pathology in a female patient.

CASE REPORT

A 41-year-old Thai female patient was requested for CT scan of the abdomen. The patient presented with a three-month history of palpable mass in the right lower quadrant of the abdomen. On compression to the mass, she had referred pain into her right lateral thigh. On abdominal examination, she had a 5-cm palpable mass, firm to hard in consistency with mild tenderness in right lower quadrant of the abdomen. The mass was not mobile.

CT showed a 4.8x3.9x3.5-cm rim enhancing mass with central hypodensity. It was located just lateral to right psoas muscle and anterior to right iliacus muscle (Fig.1, 2).

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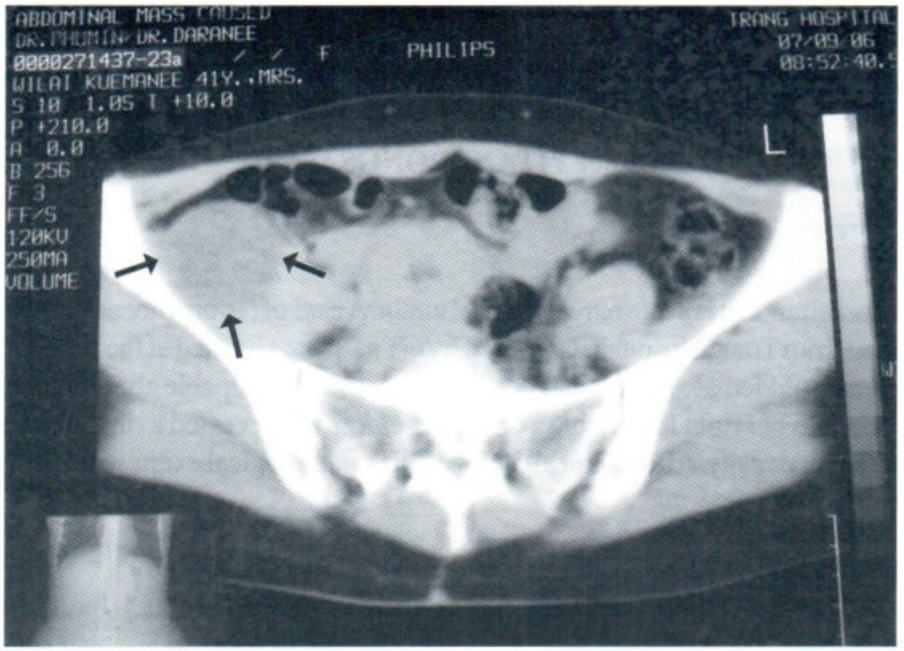

Fig.1 Nonenhanced axial CT scan reveals a well-defined round mass with homogereous hypodensity. The mass is located just lateral to right psoas muscle and anterior to right iliacus muscle.

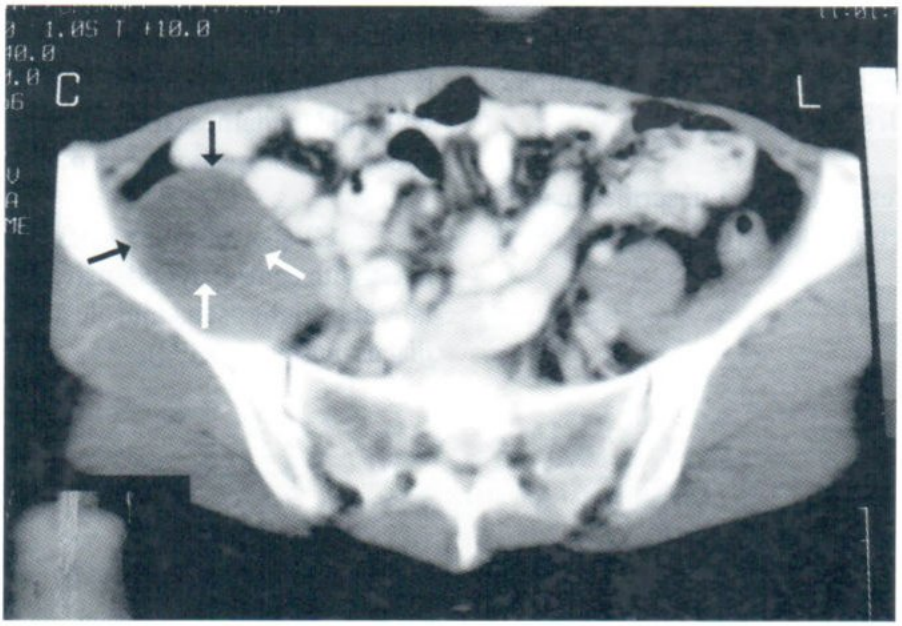

Fig.2 Enhanced axial CT scan reveals rim enhancement of the mass with central hypodensity.

The patient underwent surgery. Surgery revealed retroperitoneal cyst placed on lateral portion of right psoas muscle. Complete excision was performed. Histopathological examination was diagnosed as a neurilemmoma.

DISCUSSION

Neurilemmoma is the most common neurogenic tumor. They are benign, encapsulated tumors of the nerve sheath. They can present in many locations but rarely in the retroperitoneum.[1-11] Only 1% is found in the retroperitoneum, which accounts for 0.5%-1.2% of all retroperitoneal tumor.[2,4,5] Abdominal neurogenic tumors are most commonly located in the retroperitoneum, especially in the paraspinal areas and adrenal glands.[1] Patients with benign retroperitoneal neurilemmomas are predominantly in their second to fifth decade, and women are twice as often affected as men.[1,4,6] Presentation is typically varied and non-specific ranging from low back pain, abdominal pain, abdominal mass or an incidental finding.[1-12] Referred pain and neurological symptoms in the lower extremities have also been described.[3,6,11] As in the presented case, she had abdominal mass with referred pain into her right lateral thigh on compression to the mass. The low frequency of this tumor and the lack of specific signs and symptoms make presurgical diagnosis very difficult.

At CT, a neurilemmoma appears as a well -demarcated round or oval mass that frequently demonstrates prominent cystic degeneration and calcification. At contrast-enhanced CT, they demonstrate variable homogeneous or heterogeneous enhancement. Heterogeneous areas on enhanced CT scans may be due to cystic and hemorrhagic changes.[1,2,5,8,11] Cystic changes occur more commonly in retroperitoneal neurilemmoma (up to 66%) than in other retroperitoneal tumors.[5] It is difficult to identify the peripheral nerve from which retroperitoneal neurilemmoma develop.[1] These features are not pathognomonic images. Therefore, misdiagnosis of retroperitoneal neurilemmoma is not uncommon. It can be confirmed only during surgery and definitive histopathological examination.[1,2,5]

The resection of this tumor is the appropriate treatment. Prognosis is quite good since post-surgical recurrences are unusual.[2-5]

CONCLUSION

Retroperitoneal neurilemmomas are rare tumors arising from the neural sheath of peripheral nerves. Symptoms and CT findings are non-specific and can mimic with different diseases. Diagnosis is based on histopathological examination. The encapsulated cystic mass in retroperitoneum on CT, especially in a patient with a history of referred pain in the lower extremities, should raise the possibility of a neurilemmoma in the differential diagnosis. And it is important to recognize these tumors as benign with excellent prognosis so as to avoid unnecessary extensive radical surgery.

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