IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 19, Issue 12 Ser.10 (December. 2020), PP 29-31
www.iosrjournals.org

Case Report: A Rare Case of Retroperitoneal Schwannoma

Dr Darshan Parmar [1], Dr Rakesh A. Makwana[2], Dr R. D. Patel[3]
[1](3rd year resident, Department of general surgery, B.J. medical college, Ahmedabad, India)
[2](MS assistant professor, Department of general surgery, B.J. medical college, Ahmedabad, India)
[3](MS assistant professor, Department of general surgery, B.J. medical college, Ahmedabad, India)

Date of Submission: 07-15-2020 Date of Acceptance: 22-12-2020

I. Introduction

Schwannomas are solitary and encapsulated tumours attached to or surrounded by nerve, although paralysis of the associated nerve is unusual(1). Schwannoma is a mesenchymal tumour that is mainly located in the peripheral nerves or the central nervous system. Its retroperitoneal location is rare and commonly asymptomatic.

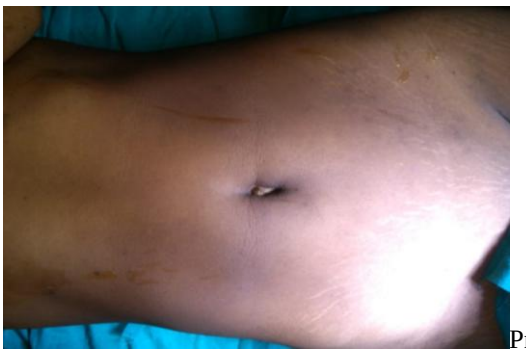
Thus, it is usually diagnosed when imaging tests are performed for other purposes. The clinical course of Schwannoma is benign but it also has malignant potential. Therefore, surgical resection is the treatment of choice. The definitive diagnosis is anatomopathological.

II. Case report

History

A 27-year old female presented with abdominal lump since 1 year gradually increasing in size. There was no gastrointestinal or genito-urinary disturbances. Patient was non-pregnant Parous woman with one male & one female child with no menstrual complains.

Examination

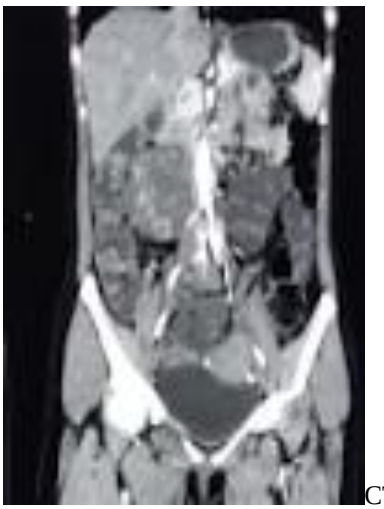

Preoperative view

Physical examination revealed a average built & nourishment. There was no pallor, Icterus, oedema, Lymphadenopathy. Abdominal examination revealed No Scar, No dilated Veins, No peristalsis, No Pulsation. Lump in right Flank region 5 Cms by 5 Cms, firm, non-tender, smooth surface,non-ballotable,not moving on respiration, renal dullness on right was normally present. Finger could be insinuated between right costal margin and Lump. Dull note over Lump. Per Rectal Examination was normal.
Clinically it could be renal Lump, adrenal Lump.

Investigation

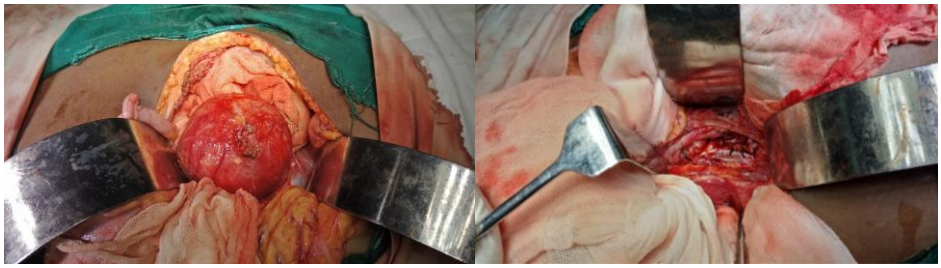
Haemogram, Urine, Blood Biochemistry, Chest & Abdominal X ray were Normal.
USG Abdomen was approximately 66 by 56 by 80 mm sized well defined heterogeneously hyperechoic with internal vascularity noted in right paracaval region,posteriorly lesion abuts right psoas. Medially the lesion abuts & compress Inferior vena cava. Posterolaterally the lesion abutts lower pole of right kidney. Inferiorly the Lesion abutts and displaces bowel loops. Superiorly the lesion abutts right renal Vein.
Rest of the Intraabdominal organs & Pelvic organs were normal.
CECT ABDOMEN revealed approximately 67 mm by 73 mm by 77 mm sized well defined encapsulated heterogeneously enhancing soft tissue density lesion with few foci of Calcification within is noted in right

anterior pararenal space in right peracaval location S/O Right Retroperitoneal Mass of neurogenic origin Diiferentials would be
Schwannoma or Ganglioneuroma


CT plate showing Right retroperitoneal Lump

Management

Surgical removal by Kochers Incision slight inferior than usual & extending upto Right Mid-axillary Line. On exploration,6 Cm by 6 Cm by 7 cm firm encapsulated mass with Postero-medially Displacing Inferior Vena Cava. Right Lumbar branch of Abdominal Aorta & few Tributaries to Inferior Vena Cava were ligated. No Obvious Change in Blood Pressure of the patient was seen on Touching. The mass has complete capsule & complete resection was executed. Rest of the Visceras were normal. No areas of Necrosis or Infarction were seen Grossly. Abdominal drain kept on Right Side. Intra operative images are attached.



Post-Operative Drain output Day 1 was 50 cc Serohaemorrhagic, on day 2 –20 cc, day 03– 10 cc, day-04– 0 cc, removed on day 04.
Biopsy revealed Benign peripheral Nerve Sheath Tumour Schwannoma. No evidence of Malignancy.
Post-operative Stay was uneventful.
Patient was discharged on post-operative day-05.
After 06-months follow up, no evidence of recurrence or any other complication noted.

III. Discussion

Schwannomas, arising from Schwann cells of peripheral nerve sheaths, are mostly benign tumors. They are often found in the head, neck and extremities in the 4th and 6th decades of life(2). Studies have shown that only 0.7-2.6% of schwannomas are found in the retroperitoneum. Generally, schwannomas are less than 5cm in diameter. But retroperitoneum is a nonrestrictive space which allows the tumors to reach a large size over a long time of growth(3) .Schwannomas are mostly well-demarcated round or oval masses on CT and MRI. Cystic and hemorrhagic degeneration can be seen in large retroperitoneal schwannomas, which appear as inhomogeneous low-density masses and homogeneous to heterogeneous contrast enhancement on enhanced CT. MRI images can reminder the origin and the exact location of the mass. The intensity of the masses can help with the inference of their properties. However, these changes are non-specific. We are not able to make a final diagnosis through these radiographic results. For retroperitoneal masses larger than 4 cm, especially those with clinical symptoms, surgical removal is regarded as the most rational way, with the benefit of both diagnosis and therapy(5).

An incomplete excision may increase 5-10% of local recurrence (4). Moreover the possibility of malignancy is considerable. Therefore, a complete excision is necessary. To make a final diagnosis, we need to combine pathology and immunohistochemistry. The prognosis of retroperitoneal schwannomas are mostly good. The most common complication is recurrence, possibly caused by incomplete excision. In the present study, we introduced a giant posterior pararenal schwannoma which was believed to be the largest one reported in this location by far. There is a dilemma on the preoperative diagnosis of pararenal schwannoma. It's important to include schwannomas during the differentiation of pararenal masses, especially for those with cystic and hemorrhagic degeneration since the treatment and prognosis among them may differ a lot.

Bibliography

[1]. Bailey & Love Short Practice of Surgery, 27th edition Chapter 47,Pg Number 725-759
[2]. Baten E, Lerut J and Kempeneers I: Hybrid open/closed resection procedure for ancient retroperitoneal Schwannoma: Case report and review of the literature. Acta Chir Belg 116: 289-292, 2016.
[3]. Karaköse O, Pülat H, Oğuz S, Zihni İ, Özçelik KÇ, Yalta TD and Eken H: A giant ancient schwannoma mimicking an adnexal mass: Case report. Medicine (Baltimore) 95: e4240, 2016.
[4]. Lee NJ, Hruban RH and Fishman EK: Abdominal schwannomas: Review of imaging findings and pathology. Abdom Radiol (NY) 42: 1864-1870, 2017.
[5]. Giant posterior pararenal schwannoma: A case report and review of literature XIQI PENG, ZUWEI LI, LIANG ZHOU, LIWEN ZHA , XIONGHUI WU , YU YANG , SHANGQI YANG , YUN CHEN and YONGQING LAI, Guangzhou Medical University, Guangzhou, Guangdong, Peking University Shenzhen Hospital, Shenzhen, Guangdong ,June 29, 2018

Dr Darshan Parmar, et. al. "Case Report: A Rare Case of Retroperitoneal Schwannoma." *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, 19(12), 2020, pp. 29-31.