

## Neurolipoma: A rare entity with a rarer presentation

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### ABSTRACT

Neurolipoma are benign tumors usually occurring in the third decade of life and commonly involving volar aspects of the hand, wrist and forearm of young people. This case is unusual, as the patient was in her late sixties and presented with a huge retroperitoneal lump. Both, her age and the location of the tumor vary from its common presentation. Patient was operated with complete removal of the tumor; histopathology confirmed it as Neurolipoma with myxoid changes. Followup for next five months was uneventful.

**Keywords:** neurolipoma, ganglioneuroma, lipoma

### INTRODUCTION

Lipoma is a common benign tumor and neurolipoma is one of its variants. It is also referred as neural fibrolipoma. It usually manifest as a soft, slowly growing mass consisting of proliferating fibro fatty tissue surrounding and infiltrating major nerves and their branches.<sup>1</sup> Most common sites of presentations are volar aspects of the hands, wrists and forearms of young persons.<sup>2-6</sup> The lesion is almost seen during first three decades of life. About one third of cases are associated with overgrowth of bone and macrodactyly. We report here a rare case which presented with huge lump in the abdomen, clinically diagnosed as Ganglioneuroma.

### CASE REPORT

A 68 years old female presented with off and on fever for past 6 months, abdominal fullness and pain on right side for 3 months. She was asymptomatic 6 months back when she developed off and on high grade fever with chills and rigors which subsided spontaneously, not associated with seasonal or diurnal variation. She initially got treated locally with no significant relief. She developed a feeling of fullness in right side of the abdomen since 3 months with dragging sensation, and could self palpate an abdominal mass which was gradually increasing to occupy the whole abdomen at presentation.

Past history, family history or personal history revealed nothing significant. General examination exhibited Pallor - Grade II, temperature-99° F and rest of the presentations within normal limits. Systemic examination was unremarkable. Local examination revealed, abdomen grossly distended with everted umbilicus. A non-tender, smooth mass of size 25×25 cm was palpable which was firm in consistency, not moving with respiration, extending to right half of the abdomen, left hypochondrium and epigastric region. It was not fixed to the skin but appears to be fixed to deeper tissue. Percussion showed dullness over the mass but rest of the abdomen was tympanic. On auscultation, no bruit was heard. Bowel sounds audible only in left iliac and parts left lumbar quadrant. Lab investigations showed Hemoglobin – 8.4 gm% and rest within normal limits.

Helical CT of abdomen showed homogenous septated smooth large soft tissue mass of 192×130×230 mm on right side of retro peritoneum, extending from right iliac fossa to right dome of diaphragm. Liver and right kidney was displaced anteriorly and to the right, correspondingly IVC also displaced and lying close to aorta. The mass was crossing midline and displacing duodenum.

Fine needle aspiration cytology showed mixed population of spindle shaped cells with wavy nuclei as well as stellate cells and a small cluster of large round neuronal like cells lying in a myxoid stroma directing the diagnosis to neurolipoma with myxoid change.

An operation was planned; patient was transfused 2 units of whole blood in pre operative phase with Hb reaching 10.2 gm%. A mass was occupying the whole abdomen pushing all the gut structures below and to the left. It was abutting the anterior surface of the right kidney which was released with care. No major neurovascular structure was damaged. Grossly, it was a large tissue measuring 25×25×16 cm. Outer surface was greyish white and appeared to be encapsulated. Cut section was greyish yellow with cystic, myxoid and small hemorrhagic areas.

Histopathological picture confirms the diagnosis of neurolipoma. S100 stain was also done to confirm the neural tissue. The tumor was positive for neural tissue.

The patient was continuing to be symptom free in her 3<sup>rd</sup> followup 5 months after surgery after which she lost follow up.

## DISCUSSION

Our patient was in her late sixties, the usual presentation is in the third decade. The site of involvement was retroperitoneum, whereas the common sites for neurolipoma are the volar aspects of the hand, wrist and forearm. Other histopathological variants include Myxomatous liposarcoma, Lipomatous neurofibroma, Spindle cell lipoma and Neurofibroma with vacuolation.<sup>7-9</sup> Distinction between these is many times difficult. The abundance of benign lipocytes as compared to fibrous tissue, presence of neural tissue and presence of myxoid changes all favour the diagnosis of Lipoma with neural proliferation.

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