

Myxolipoma in the Neck - A Case Report with Review of Literature

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Abstract

Case Report

Myxolipoma is an uncommon type of mesenchymal tumor. It is a lipoma admixed with abundant mucoid substances and is considered to be a lipoma with a high degree of myxoid change. We present a rare case of a benign mesenchymal tumor with a lipomatous and myxoid component. An 86 year old male patient presented with the chief complaint of swelling on the left side of the neck. Ultrasonography of the swelling was indicative of cystic swelling with benign etiology. Magnetic Resonance Imaging revealed a well-defined complex lobulated lesion along the anterior and the superior aspect of the left sternoclavicular joint in the subcutaneous plane. Aspiration cytology was suggestive of a mesenchymal tumor. Thereafter the swelling was excised and histological examination revealed features of myxolipoma. The postoperative course was uneventful with no evidence of recurrence two years after the surgery.

Keywords: Myxolipoma, Benign tumor, Neck.

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INTRODUCTION

Lipomas are the most common benign tumors of mesenchyme arising from mature adipose tissue. They have different histological variants. Myxolipoma is one of the rare variants with a high degree of myxoid change owing to its abundant mucoid component. The different locations include the retroperitoneal region, heart, tongue, oral cavity and epiglottis [1] but the neck is a rare location. Here we report a case of myxolipoma involving the neck that presented to our institution.

CASE REPORT

An 86 year old male presented to the surgery outpatient department with the chief complaint of swelling on the left side of the neck for 5 months which was progressively increasing in size, non-mobile and painless. There was no history of trauma, no complaints of fever, dysphagia, difficulty in deglutition and cough. There was no history of any chronic medical illness. Physical examination revealed nothing abnormal. There was a history of past surgical intervention for similar swelling twice in the past 2 years. Previous histopathological reports were suggestive of fibrolipoma.

Further imaging studies were undertaken for the presented swelling. Ultrasonography was indicative

of masses in the upper part of the chest in paramedial location on the left side suggestive of benign etiology. Magnetic Resonance Imaging revealed well defined, complex, lobulated lesion measuring 7.5 x 6.9 x 4.9 cm on the antero-superior aspect of the left sternoclavicular joint. It showed smooth and regular margins causing a bulge of overlying skin and subcutaneous tissue (Fig-1).

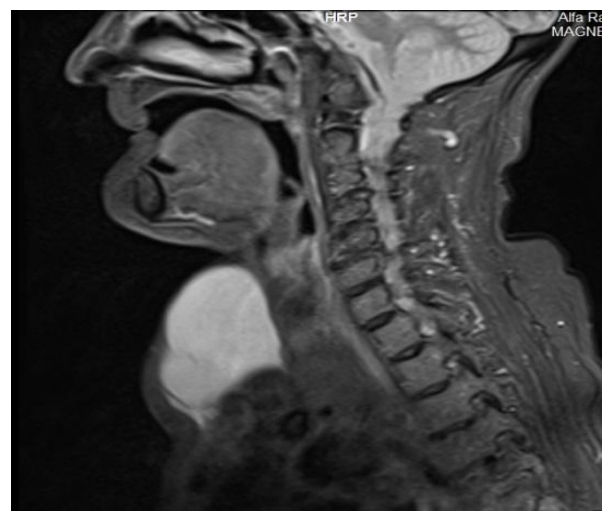


Fig-1: MRI Neck revealing a lesion along the antero-superior aspect of left sternoclavicular joint

Fine needle aspiration cytology of the swelling revealed a benign mesenchymal tumor (Fig-2).

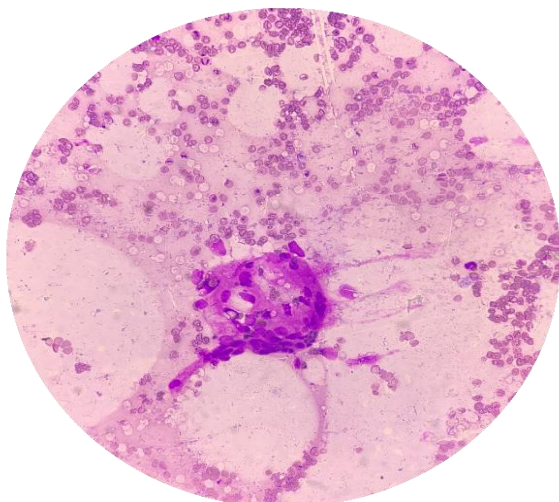


Fig-2: Photomicrograph of FNAC revealing benign mesenchymal tumor (400X)

The patient underwent complete removal of the tumor. Histopathological evaluation exhibited an encapsulated cystic swelling measuring 9.5x5.5x5 cm which on cut section revealed gelatinous material (Fig-3).



Fig-3: Excised mass revealing gelatinous material on cut section

The microscopic examination showed a well-encapsulated circumscribed mass comprising of mature adipose tissue separated by fibrous septa with extensive areas of myxoid change and an abundance of thin-walled blood vessels. Myxoid area stained strongly with alcian blue (pH 2.5). No mitotic figures, hemorrhage, necrosis and cellular atypia seen (Fig 4 & 5).

The patient was on routine follow up and there was no evidence of recurrence 2 years after the surgery.

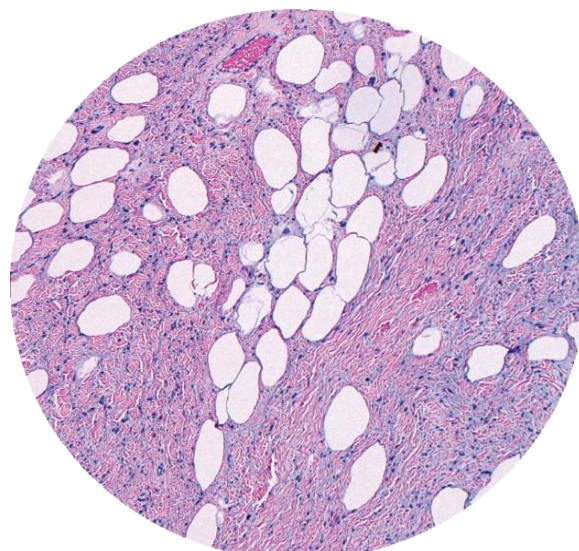


Fig-4: Photomicrograph revealing extensive areas of myxoid change (H&E 400X)

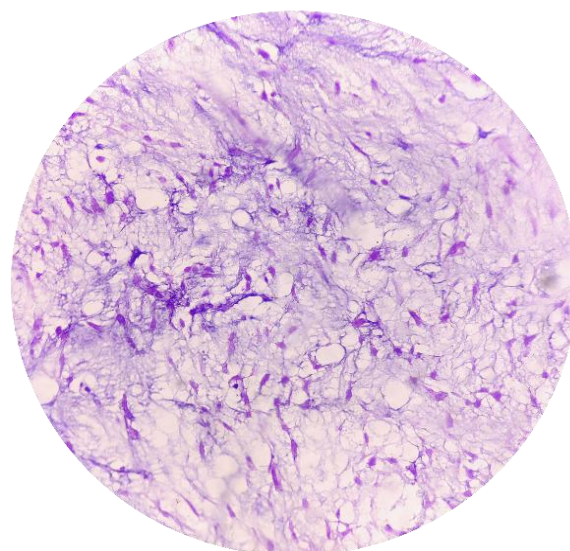


Fig-5: Photomicrograph revealing extensive areas of myxoid change (H&E 400X)

DISCUSSION

Lipomas are the most common benign mesenchymal tumors of the human body composed of adipose tissue. They exhibit slow growth and are usually asymptomatic. They are superficial, solitary, encapsulated, subcutaneous or submucosal masses which are histologically made up of mature adipocytes of uniform shape and size [4].

Myxolipoma is a rare histological variant of lipoma. It is a lipoma admixed with abundant mucoid substance. Most patients are in the fifth or sixth decade of life. Various other rare morphologic variants of lipoma include fibrolipoma, angioliipoma, myolipoma, chondroid lipoma and spindle cell lipoma. On Haematoxylin & Eosin sections, it is seen composed of mature adipose tissue with no cellular atypia and extensive stromal myxoid change [2]. The myxoid

material is made up of glycosaminoglycans, sulphated (chondroitin sulphate, keratin sulphate) and non sulphated (hyaluronic acid). It stains positively with special stain alcian blue and gets digested by hyaluronidase. Electron microscopy shows adipocytes in different stages of differentiation with lipid globules of variable size in the cytoplasm [4].

On a Computed Tomogram scan, lipoma shows a homogeneous mass with encapsulation and on Magnetic Resonance Imaging, lipoma has high signal intensity on T1-weighted images [5].

The differential diagnoses of myxolipoma include other lipomatous tumors with abundant mucoid substances, such as chondroid lipoma, spindle cell lipoma with myxoid changes and myxoid liposarcoma. Histopathology is the gold standard for diagnosis. Surgical excision is the treatment of choice [3].

Singhal SK *et al.* presented a case report on myxolipoma of the epiglottis in an adult in which they found lipoma with foci of myxomatous degeneration in a 56 year old female [6].

Nayyar R *et al.* reported myxoid adipocytic tumor with ureteropelvic junction obstruction in the Horseshoe kidney, a very rare presentation that helped in the active surveillance of the patient with interval imaging and renal dynamics scans [7].

Lee HW *et al.* presented a case report of angiomyxolipoma of subcutaneous tissue in which the lesion consisted of adipose tissue without lipoblasts, extensive myxoid areas and numerous blood vessels [8].

CONCLUSION

Myxolipoma is a rare benign lipoma containing mucoid substance displaying characteristic histopathological features.

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