



Chondrolipoma of Arm: First Report

Authors

E. Arun¹, S. Jagadesh Chandra Bose²

¹No: 1880, Thiruvalluvar kudiyruppu, 25th street, I block, Annanagar, Chennai 600040

Email: dr.arun@ymail.com

²No.1, Ramachandra Nagar, Sri Ramachandra Nagar, Porur, Chennai, Tamil Nadu 600116

Email: jeganbose@gmail.com

Abstract

Chondrolipoma of arm is a rare benign tumor composed of mature adipose, cartilaginous and osseous tissues. We present one such case in a 40 year old male with a swelling in left arm. The tumor was diagnosed as sarcoma clinically for which wide monobloc excision of the tumor and lattismus dorsi reconstruction was done. The diagnosis of chondrolipoma was possible only by histological examination. This case is reported because of its rarity.

Introduction

Lipomas are the most common benign soft tissue tumor consists of mature adipose cells. Lipomas occasionally have areas of bone or cartilage formation and are classified as chondrolipomas respectively^{1,2} with the occurrence in extremities is extremely rare^(3,4,5,6).

Case Report

A 40 years old male presented with a firm swelling of 10 x 8 cm size in the left arm for 3 years progressively increasing in size and not associated with pain and which was palpable on the lateral and posterior aspect of left arm. There was no history of trauma.

A plain radiograph showed irregular mineralization in soft tissue (Figure 1 and 2).



Figure 1



Figure 2

Ultrasound of left arm done which showed a 10x7cm soft tissue mass lesion with hyperechoic linear strands and multiple curvilinear calcifications noted within the lesion.

An MRI showed a large irregular mass displaying predominantly hyperintense signals in T1 and T2 in the inter and intramuscular plane of the left arm encasing the humerus (figure 3).

It measures about 9.5cms anteroposteriorly, 7.7cms transversely and 17cms craniocaudally extending into the triceps and biceps muscles.



Figure 3

Cytology smear shows cluster of mature adipocytes and fibrofatty stromal fragment in a hemorrhagic background.

Core biopsy showed fragments of bone, cartilage and very tiny fragments of neoplasm composed of lobules of mature adipocytes intermixed with myxoid areas suggestive of myxoid spindle cell neoplasm.

Patient was taken up for surgery under general anaesthesia. Monobloc excision of the lesion along its posterior compartment and brachialis done with posterior floor of the margin of periosteum of the humerus followed by latissimus dorsi reconstruction.

Specimen was sent for histopathological examination. Gross examination (figure 4) showed a grey yellow to grey brown soft tissue mass of size (15x10x8 cms), hard in consistency. Microscopic multiple sections from the tissue showed lobules of mature adipose tissue with areas showing cartilaginous and osseous metaplasia. From these findings, definitive diagnosis was chondrolipoma.



Figure 4

Discussion

Lipomas are the most common soft tissue tumors usually occurring in the subcutaneous and muscular tissues. It primarily contains mature adipose cells but occasionally have areas of bone and cartilage formation and are categorized as osteolipoma and chondrolipoma respectively.

We report a rare case of chondrolipoma of arm with its evident radiological and pathological features. Chondrolipomas can also be present on the chest wall, back, tongue, buccal mucosa and breast respectively⁽⁷⁾.

Histologically these are metaplasia from lipoma and are not neoplastic changes. Microscopic

sections from the tissue of our patient showed lobules of mature adipose tissue with areas of cartilaginous and osseous metaplasia. Thus the diagnosis rest solely on histopathological examination. The best treatment of choice is complete surgical excision⁽⁸⁾

Very limited data on the cases are available with no data on recurrence rates and malignant transformation were described. We conclude that the chondrolipomas are rare benign tumors and surgical excision or core biopsy is always advised for diagnosis.

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