ejpmr, 2021,8(4), 606-609

SJIF Impact Factor 6.222

EUROPEAN JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.ejpmr.com

Case Report

ISSN 2394-3211

EJPMR

CASE REPORT: RECURRENT SPINDLE CELL SARCOMA OVER CHEST WALL IN EARLY AGE OF LIFE

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Article Received on 02/02/2021 **Article Revised on 22/02/2021** **Article Accepted on 12/03/2021**

ABSTRACT

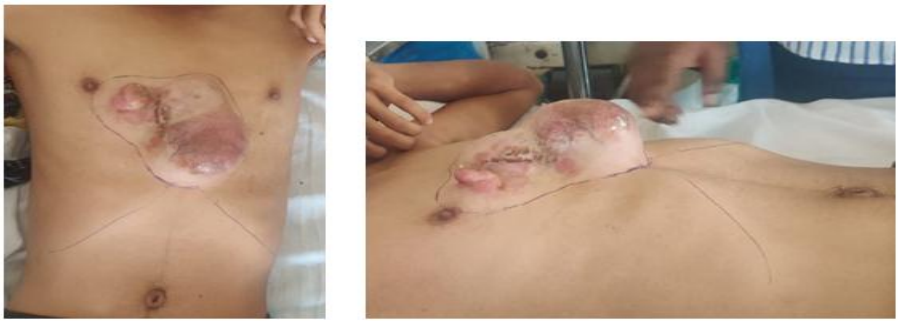
Chest wall sarcomas are very rare entities which are growing slow. A variety of sarcomas can present with a painful or painless mass, which often requires histological testing for diagnosis. A multidisciplinary team is necessary for the management of chest wall sarcomas. A 25 years old male presented with a slowly enlarging chest swelling for 15 years duration but in last 9 months it suddenly increased in size and painless swelling. On histopathology report suggestive of spindle cell sarcoma. He had a similar chest swelling at same location excised 11 years of age. We reported this case to emphasize the spindle cell sarcoma in differential diagnosis of chest swelling in young adults. The literature is reviewed and classification, symptoms, diagnosis, and treatment of spindle cell sarcoma are discussed. Complete wide local excision with surgical reconstruction remains the treatment of choice which will help in reducing the rate of recurrence.

KEY-WORDS: spindle cell sarcoma; chest wall Swelling; Recurrence.

INRTODUCTION

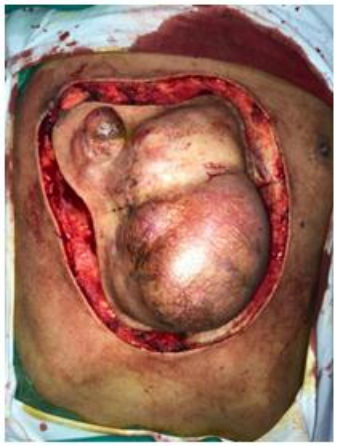
Primary soft-tissue sarcoma of the chest wall is a rare disease. The most common presentation is a slowly growing mass that is asymptomatic until it becomes large enough to compress or invade the surrounding structures.[1] By the time they are diagnosed, most tumours are already large and advanced with an average size of 15 cm at the time of diagnosis. Sarcomas are rare malignant tumours that are mesenchymal in origin. They constitute 1% of all malignancies in adults and out of this approximately 10-15% have been reported to appear in the chest wall.[2][3] Diagnosis is confirmed by a plain chest X-ray, computed tomography scan. An open or Tru-cut biopsy is performed for planning the course of the treatment. Wide local excision with tumour-free margins. Followed by soft tissue coverage done.[4] In our report, we discuss the course of management in young adult patient who presented with a large chest wall sarcoma. Informed consent was obtained from the patient for this study.

After taking informed written consent, patient had been taken for surgery. Wide local excision of the swelling with 2cm of normal skin margin included in specimen. Swelling was well encapsulated and above the muscular fascia. Defect created of size 18cmx 15cm, which was reduced with sutures and remaining defect covered with split thickness skin graft. Final histopathology report revealed low grade spindle cell sarcoma. Postoperative period was uneventful and he was discharged from the hospital on postoperative day 6.After two weeks radiotherapy stated.



[A] [B]

Figure A-B: Preoperative view showing lobulated large chest wall swelling.



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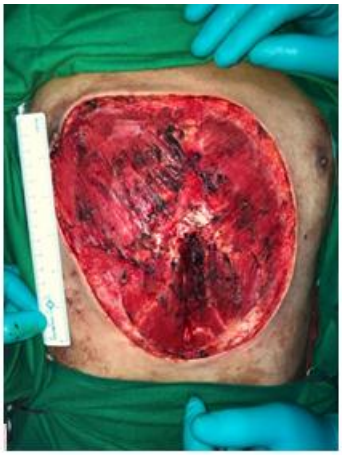

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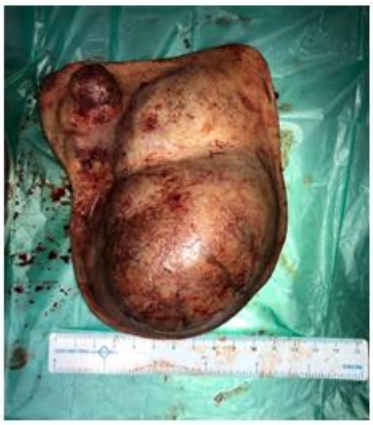

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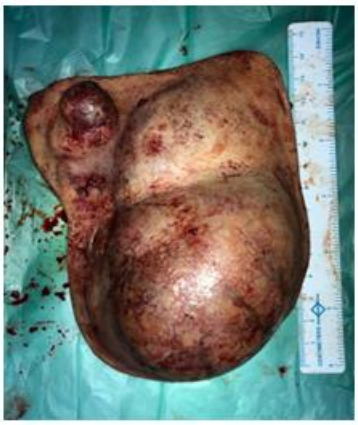
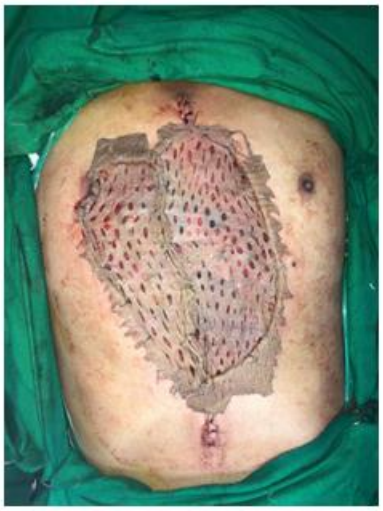
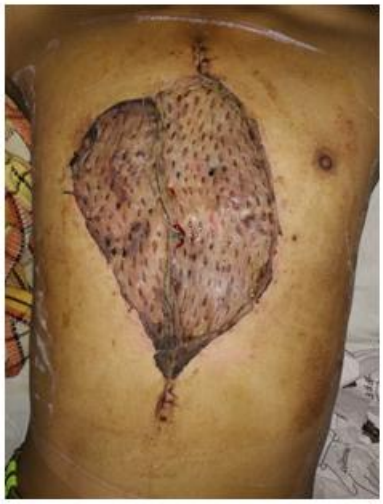


[F]

Figure C-D-E-F:Intraoperative view showing wide local excision of chest wall tumour.



[G]



[H]

Figure G-H: Postoperative view showing wound cover with split thickness skin graft and post operative day 4 healed skin graft.

CASE REPORT

A 25 years old male presented in our hospital with swelling over chest since last 15 years, which was initially small in size of 2 x 2 cm, gradually increased to present size of 10 x 8 x5 cm. He had a complaint of slight discomfort on the chest due to swelling. He had no pain over swelling, shortness of breath, dysphagia, no other swelling in body. On past history, he was operated for similar chest swelling at same location 11 years of age. He remained asymptomatic for 14 years then he noticed a sudden increase in swelling at same location in last 9months.

On clinical examination, swelling was firm, lobulated, non-mobile, situated on anterior chest wall extended superiorly up to mammary line and inferiorly up to xiphoid process and on right side of chest another lobule present 1cm away from nipple measured 12 x 10 x 7 cm size with transillumination and fluctuation test negative, non-pulsatile, dilated veins visible, no other swelling present.

On investigation, blood tests were normal. HRCT thorax revealed large lobulated cutaneous- subcutaneous soft tissue density masses showing moderate heterogenous enhancement in the lower anterior chest wall, in midline and on right side suggestive of benign fibrous sarcoma. On FNAC report, microscopic examination cellular aspirate showing spindle cells in storiform pattern. Cells have elongated bland uniform nuclei with mild pleomorphism. Few foci of collagenous strauma are seen suggestive of spindle cell sarcoma of low malignant potentials.

DISCUSSION

The chest wall tumours are rare but higher chance of recurrence. The extensive literature review and patient analysis with chest wall tumours have shown that many patients presented chest wall swelling in there early age which is diagnosed with spindle cell sarcoma.[1] Surgical treatment may be the best treatment of choice for primary tumours and recurrent tumours of the chest wall.[2] Surgery with a wide margin is a safe and good technique for the treatment of chest wall tumours with acceptable morbidity and mortality.[3]

Kachroo P, et al. reported 51 patients with primary chest wall sarcomas, underwent full-thickness resection. The results showed that local and distal recurrences were decreased by neoadjuvant systemic therapy and may improve survival in the patients.[4] The major factors that determine the prognosis include the histological grade, presence or absence of metastatic disease and attaining total resection.[5] In a study published by the Department of Surgical Oncology and Medical Statistics, Netherlands Cancer Institute, the five-year survival rate for wide local excision of primary sarcoma was 63%. The use of chemotherapy in chest wall sarcomas remains debatable. However, the use of radiation therapy in conjunction with resection has given a favorable response, especially in those cases which are resected with close or positive margins.[6] It also depends upon the stage of the disease, with the greatest benefit being attained in stage three and above.[7] Surgical resection of the tumour remains to be the treatment of choice.[8] The tumour has a tendency to infiltrate the ribs and surrounding structures. In most cases of malignant chest wall tumours, full thickness chest wall resection is needed. Therefore, thoracotomy along with resection of ribs and flap transfer to cover the skin defect is usually required.[9] We followed a similar approach in this case as our patient underwent wide local excision along with split thickness skin graft and it led to an uneventful recovery followed by radiotherapy given.

CONCLUSION

The spindle cell sarcomas are an interesting and rare occurrence on chest wall in younger age group. Management ideally involves a multidisciplinary approach as surgery Augmented with radiotherapy and chemotherapy depends upon the extent of the disease. Timely diagnosis and management offer a favorable prognosis. Therefore, formulation of standard guidelines regarding the treatment of chest wall sarcomas is needed for proper management and prevention of recurrence.

DECLARATION OF PATIENT CONSENT

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

FINANCIAL SUPPORT AND SPONSORSHIP

Nil.

CONFLICTS OF INTEREST

There are no conflicts of interest.

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