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Original Research Paper

General Surgery

A RARE CASE REPORT OF RIGHT ANTERIOR CHEST WALL SOFT TISSUE SARCOMA IN A YOUNG MALE

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ABSTRACT A sarcoma is a type of cancer that starts in tissue like bone or muscle. Sarcoma means tumor is malignant. Bone and soft tissue sarcoma are main type of sarcoma. Soft tissue sarcoma of chest wall present as pain less slow growing mass and approximately 0.1 to 0.15 all adult malignancy in chest wall soft tissue sarcoma. Chest wall tumor have 50% malignancy rate and comprise <5% all intra thoracic malignancies. We present a rare case of right side chest wall soft tissue sarcoma in 24 years old healthy male who present in OPD with swelling and pain in right side of chest. Soft tissue sarcoma was diagnosed pre operatively in HRCT chest and biopsy. Hence patents offered a wide local excision surgery.

KEYWORDS :

INTRODUCTION

Soft tissue sarcoma are a heterogeneous group of tumors which account for 1-2% adult cancer worldwide and 10-15% have been reported to appear in the chest wall Soft tissue sarcoma is rare type of tumors. Certain types occur most often in certain parts of the body more often than others. Leiomyosarcoma are most common type of sarcoma found in abdomen while liposarcoma and undifferentiated pleomorphic sarcoma most common in legs but pathologist may not always agree on the exact type of sarcoma. Sarcomas of uncertain type are very uncommon.

CASE REPORT:

A 24 year old gentleman with no past medical or surgical history presented in surgery department with pain and swelling in right chest he complain of swelling in right chest last 1 year. Swelling gradually increasing in size and from 1 month also complain of continues dull pain in chest which agravative during movement and radited to shoulder and back side. On presenting he is hemodynamically stable and examination reveled 15x10cm hard swelling in right chest.patient was further evaluated with HRCT chest.there was no evidence of metastasis chest.hense patient was offererd a surgical resection.

Operative procedure

The key steps in the surgical mainly comprised of wild local excision of tumor with tumor free margin with preservation of neuro vascular structure.

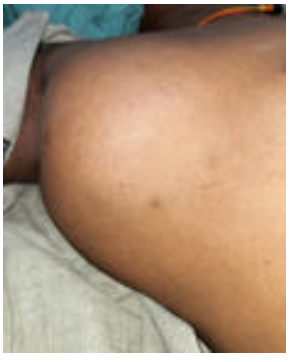

Figure 1:Preoperative showing large anterior chest wall mass

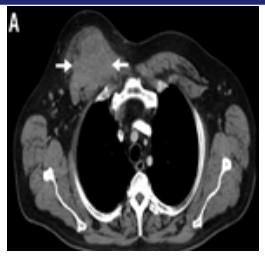

Figure 2: HRCT chest of the same arrow indicating the tumor.

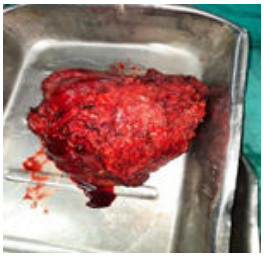

Figure 3: Intraoperative picture after WLE of the tumor

Course in the hospital:

The patients recovered well in the postoperative period liquid diet initiated 24 hours after surgery and drain output is 24 hours is 150ml. which gradually decreased and 5 day drain output 15-20ml so drain removed and patient was discharged on postoperative day 7. One month follow up show no recurrence of symptoms on Histopathology was suggestive of well differentiated squamous cell carcinoma. Resected margins were free from tumor tissue.there was no lymhovascular invasion.

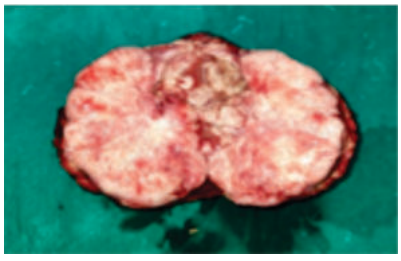

Figure 4:Picture showing the resected mass

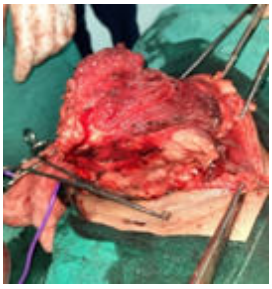

Figure 5: Cut resection of specimen showing well circumscribed tumor

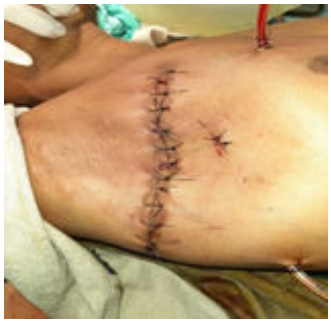

Figure 6: Postoperative image

DISCUSSION

Unlike the more common management such as colon cancer, little is known about the epidemiology of soft tissue sarcoma. This again reflect the uncommon nature of these lesions. There is slight male predominance with M:F ration 1.1:1.0. Age adjusted incidence is 152 cases per 100,000 persons. Age distribution in adults soft tissue sarcoma studied 15 <40 years 20.7% of patients, 40-60 years 27.6% of patients and >60% 51.7% of patients. In the majority of case of patients with soft tissue sarcoma, no specific etiologic agent is identifiable. However a number of predisposing factor have seen recognized. Radiation therapy (>3 years), chemical exposure (Phenoxy acetic acids (forestey and agricultural workers), cholorphenol thorotrast etc), chemotherapy cyclophasmaide mephalan, procarbazine, chlorambueil relative risk of sarcoma appears to increase with cumulative dry exposer, chronic lymphedema ttrauma a and foreign body, chronic inflamettory process. Extremity and superficial trunk sarcomas account for 60% of all soft tissue sarcoma of patient present with a painless primary soft tissue mass.

Currently, there are no screening test for soft tissue sarcoma since the majority of patient soft tissue sarcoma have lesion arising in the extremities or superficial of trunk, most of the comments here apply to soft tissue lesion, in those site. Physical examination show included an assessment of the size of the mass and its mobility relative to underlying soft tissue.

Any soft tissue mass is an adult extremity should be biopsied if it is symptomatic or enlarging >5cm or has persisted beyond. 4-6 weeks, percutaneous tissue diagnosis can usually be obtained with fine needle aspiration for cytology or percutaneous tissue biopsy for histology, needle trunk should be placed in an area to be excised or that can be encompassed in adjuvant radiotherapy most instance, when an experienced pathologist/ cytopathologist examine the specimen, a diagnosis of malignancy soft tissue sarcoma can be made percutaneous tissue diagnosis is performed to facilate subsequent treatment planning and to permit surgical resection to performed. Preoperative imaging studied with MRI or CT allow for accurate prediction of resectibility. Surgical approach to soft tissue sarcoma is based on an awareness that these lesion expand and compress tissue planes, producing a psedo capsule compressing normal host tissue. In surgical approach in which the plane of dissecting is immediately adjacent to this pseudo capsule, such as as intracapsular or marginal excision are associated with prohibitive local recurrence rated of 33-65%.

While local excision encomplassing a rim of normal tissue around the lesion has led to improvement in local control, with local recurrence rate of approximately 30% in the absence of adjuvant therapy. Localized, low grade soft tissue sarcoma of extremity can be treated by wide resection alone with local recurrence rate or <10%. Preoperative postoperative radiotherapy should be employed with 4 patients primary sarcomas in whom a satisfactorily gross surgical margin cannot be attended compromise of functional and neuro vascular structure.

There a very few case report, case series and systemic studies which have been conducted on this rare aliment. 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. It also depends upon the stage of the disease, with the greatest benefit being attained in stage three and above. 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. The major factors that determine the prognosis include the histological grade, presence or absence of metastatic disease and attaining total resection .

REFERENCES

1. Primary malignant chest wall tumors: Analysis of 40 patients. Bagheri R, Haghi SZ, Kalantari MR, et al. J Cardiothorac Surg. 2014;9:106.
2. Outcome after surgical resections of recurrent chest wall sarcomas. Wouters MW, van Geel AN, Nieuwenhuis L, et al. *J Clin Oncol*. 2008;26:5113–5118.
3. Treatment of chest wall sarcomas: A single-institution experience over 20 years. Burt A, Berriochoa J, Korpak A, et al. *Am J Clin Oncol*. 2015;38:80–86.
4. Large resection and reconstruction of primary parietal thoracic sarcoma: a multidisciplinary approach on 11 patients at minimum 2-years follow-up. D'Alessandro P, Carey-Smith R, Wood D. *Orthop Traumatol Surg Res*. 2011;97:73–78.
5. Significant benefits in survival by the use of surgery combined with radiotherapy for retroperitoneal soft tissue sarcoma. Hager S, Makowiec F, Henne K, et al. *Radiat Oncol*. 2017;12:29.
6. Ukihide Tateishi, Gregory W. Gladish, Masahiko Kusumoto, Tadashi Hasegawa, Ryohei Yokoyama, Ryosuke Tsuchiya, Noriyuki Moriyama.Chest Wall Tumors: Radiologic Findings and Pathologic Correlation.Published Online:Nov 1 2003
7. Braham E, Aloui S, Aouadi S, Drira I, Kilani T, El Mezni F. Synovial sarcoma of the chest wall: a case report and literature review. Ann Transl Med. 2013;1(1):9. doi:10.3978/j.issn.2305-5839.2013.01.09.