



ISSN: 0975-833X

Available online at <http://www.journalcra.com>

INTERNATIONAL JOURNAL
OF CURRENT RESEARCH

International Journal of Current Research
Vol. 15, Issue, 04, pp.24296-24298, April, 2023
DOI: <https://doi.org/10.24941/ijcr.44407.04.2023>

RESEARCH ARTICLE

ELASTOFIBROMA DORSI. A TWO HOSPITAL EXPERIENCE

*Efstathios K. Metaxas,¹ Eudokia Tzatzadakis,¹ Nikolaos Tzatzadakis,¹
Antonios Katsipoulakis² and Nikolaos Anastasiou²

¹Department of Thoracic Surgery, General Hospital of Nicaea-Piraeus, Greece

²Department of Thoracic Surgery, Oncological Hospital of Kifisia-Agioi Anargyroi, Athens Greece

ARTICLE INFO

Article History:

Received 04th January, 2023
Received in revised form
10th February, 2023
Accepted 16th March, 2023
Published online 25th April, 2023

Key words:

Elastofibroma Dorsi,
Surgical Treatment.

*Corresponding Author:
Efstathios K. Metaxas[

ABSTRACT

Background: Elastofibroma dorsi considered a rare benign soft-tissue tumor localized infrascapular. Could be localized also bilateral. Aim of the study to present, strategy for treatment, operative technique, complications and literature review. **Methods:** During a 10year period a retrospective study took place. Twenty nine (29) patients treated for Elastofibroma dorsi, at Thoracic Surgery Department at General Hospital of Nicaea-Piraeus Agios Panteleimon –and Department of Thoracic Surgery, Oncological Hospital of Kifisia-Agioi Anargyroi, Athens Greece. **Results:** Ten (25) female (86,206%) and two (4) male (13,793 %), aged 43-82 years mean age 70 years. Six female patients had bilateral tumor. All tumors were located infrascapular. **Conclusion:** Elastofibroma dorsi is a rare benign tumor seen in elderly female patients. Could be unilateral or bilateral. Biopsy usually performed exclude soft tissue sarcoma. CT Scan and MRI may help in diagnosis especially if it is located bilateral. Surgical excision, marginal excision of the tumor can be performed when patient in pain with minimal morbidity. Minimal drainage required for almost two days. In case of seroma a needle aspiration by a syringe and anti-inflammatory oral medication seems that is really helpful. Also a few sutures below the incision may be very helpful to minimize the free space. The radical surgical excision is the gold standard.

Copyright©2023, Efstathios K. Metaxas et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Efstathios K. Metaxas, Eudokia Tzatzadakis, Nikolaos Tzatzadakis, Antonios Katsipoulakis and Nikolaos Anastasiou. 2023. "Elastofibroma dorsi. A two hospital experience". International Journal of Current Research, 15, (04), 24296-24298

INTRODUCTION

Elastofibroma dorsi is a benign soft-tissue tumor with a characteristic location and imaging appearance.^{1,2,3,4} It is very rare.^{1,2,3,4} It is also more frequently seen in elderly female population women.^{1,2,3,4} Aim of the study to present a two hospital experience upon strategy, treatment, operative technique, management and literature review.

METHODS

During a 10year period a retrospective study took place. Twenty nine (29) patients treated for Elastofibroma dorsi, at Thoracic Surgery Department at General Hospital of Nicaea-Piraeus Agios Panteleimon –and Department of Thoracic Surgery, Oncological Hospital of Kifisia-Agioi Anargyroi, Athens Greece.

RESULTS

During a 10year period twenty nine (29) patients treated for Elastofibroma dorsi, ten (25)female (86,206%) and four (4) male patients (13,793 %), aged 43-82 years mean age 70 years. To mention that six female patients diagnosed with bilateral Elastofibroma dorsi. All of these female patients underwent unilateral tumor excision.

The side was selected by the size and the gravity of pain. All these patients underwent limited incision, excision of the tumor and drainage for two days. Hospital stay was two days. All patients had uneventful recovery, no pain, no wound infection. Only one female patient developed seroma. The seroma was aspirated by a syringe, anti-inflammatory oral medication was given and finally a couple of sutures given. The Vacuum was kept for two days to avoid seromas. The site of occurrence was in the typical infrascapular region in our study population. No biopsy preoperative was performed. Biopsy performed postoperative in all patients. Seems that CT and MRI for the thorax considered gold standard for diagnosis. In case of seroma a needle aspiration by a syringe and anti-inflammatory oral medication seems that is really helpful. Also a few sutures below the incision may be very helpful to minimize the free space.

DISCUSSION

Elastofibroma dorsi is a benign soft-tissue tumor. It is more frequently seen in older women around 65-70 years.^{1,2} Elastofibroma dorsi is classically located in the infrascapular or and subscapular regions, deep to the serratus anterior and latissimus dorsi musculature.^{1,2,3,4} May occur in axilla, ischia tuberosity, greater trochanter, posterior elbow, stomach, rectum, omentum, eye, hand and foot. Infra unilateral masses have a slight right-sided predilection, but up to 30% of elastofibromas are bilateral.⁵



Image 1. Elastofibroma dorsi located Infrascapular in a female patient



Image 4. Elastofibroma dorsi located Infrascapular



Image 2. Elastofibroma dorsi post procedure.



Image 5. Seroma aspiration with a syringe



Image 3. Elastofibroma dorsi located Infrascapular on CT scan.



Image 6. Sutures below the incision

It was first described by OH Jarvi and AE Saxon in 1959.⁴In many cases the patients are asymptomatic, but up to 50% of patients describe localized symptoms including, pain especially on movement and sensation of clicking, snapping, or clunking of the scapula.

Radiographic features

ULTRASOUND: Ultrasound demonstrates a well-defined multi-layered pattern of hypo echoic linear areas of fat deposition intermixed with echogenic fibro elastic tissue.

CT: These masses typically appear as poorly defined soft-tissue masses with attenuation similar to that of the adjacent skeletal muscle. They are located in the infrascapular or subscapular region.^{6,7}

MRI: The mass appears as alternating fibrous and fatty components. Although the borders of these masses are relatively well defined, no capsule can be identified. Could be located anterior or caudal to the inferior pole of the scapula, and deep into latissimus dorsi, serratus anterior, and rhomboid muscles.^{6,7} The appearance of a soft tissue mass with signal intensity similar to skeletal muscle with regions of alternating high and low signal intensities on T1 and T2 weighted spin echo sequences in the typical sub infrascapular location was diagnostic of elastofibromas especially if the lesion was bilateral.

- T1 fibrous component: isointense to muscle, fatty component: high signal
- T2 fibrous component: isointense to muscle fatty component: high signal
- T1 C+ (Gd): heterogeneous low level enhancement

PET-CT: Elastofibroma dorsi frequently shows mild to moderate FDG uptake, which should not be misinterpreted as a malignant lesion⁶. Biopsy preoperative can confirm the diagnosis. No biopsy was done preoperative.⁸ Seems that the CT and MRI for the thorax considered helpful more than enough. Biopsy performed postoperative in all patients.⁸

CONCLUSION

Elastofibroma dorsi is a rare benign tumor seen in elderly patients.^{1,2,3,4,5} Located Infrascapular deep to the fascia and attachment to the ribs suggest the possibility of soft tissue sarcoma. Could be unilateral or bilateral.^{1,2,3,4,5} MRI may help in diagnosis specially if it is located bilateral.⁶ Biopsy usually performed to exclude soft tissue sarcoma.^{7,8} Surgical excision, marginal excision of the tumor can be performed when patient in pain with minimal morbidity.^{1,3,7,8} The radical surgical excision is the gold standard.^{1,3,7,8} Minimal drainage required for almost two days.^{3,7} In case of seroma a needle aspiration by a syringe and anti-inflammatory oral medication seems that is really helpful.

Also a few sutures below the incision may be very helpful to minimize the free space. Kindly suggested to keep vacuum (Porto Vac) for at least two days to avoid seromas. The site of occurrence was in the typical infrascapular region in our study population. No biopsy preoperative was performed. Biopsy performed postoperative in all patients. Seems that CT and MRI for the thorax considered gold standard for diagnosis.

REFERENCES

1. Efstathios K. Metaxas, Antonios Katsipoulakis, Dimitrios Tsitsimelis et al. Elastofibroma dorsi. Our experience and literature review. July 2020 International Journal of Current Research 12(07):12389-12391 DOI: 10.24941/ijcr.39116.07.2020
2. Ochsner JE, Sewall SA, Brooks GN et-al. Best cases from the AFIP: Elastofibroma dorsi. Radiographics. 26 (6): 1873-6. doi:10.1148/rg.266055184
3. Chandrasekar CR, Grimer RJ, Carter SR et-al. Elastofibroma dorsi: an uncommon benign pseudotumour. Sarcoma. 2008;2008 : 756565. doi:10.1155/2008/756565
4. Naylor MF, Nascimento AG, Sherrick AD et-al. Elastofibroma dorsi: radiologic findings in 12 patients. AJR Am J Roentgenol. 1996;167 (3): 683-7. doi:10.2214/ajr.167.3.8751681
5. Ozpolat B, Yazkan R, Yilmazer D et-al. Elastofibroma dorsi: report of a case with diagnostic features. J Ultrasound Med. 2008;27 (2): 287-91.
6. Onishi Y, Kitajima K, SendaM et-al. FDG-PET/CT imaging of Elastofibroma dorsi. Skeletal Radiol. 2011;40 (7): 849-53. doi:10.1007/s00256-010-1057-3
7. Soler, R., I Requejo, F Pombo, A Sáez. Elastofibroma dorsi MR and CT findings. European journal of radiology, 1998 – Elsevier.
8. Pierce JC, 2018. III, R Henderson - Hyper metabolism of *Elastofibroma Dorsi* on PET-CT. American Journal 2004 - Am Roentgen Ray Soc, 47 (2):27-28.
