

CASE REPORT

doi: 10.5455/medarh.2018.72.74-75

MED ARCH. 2018 FEB; 72(1): 74-75

RECEIVED: DEC 05, 2017 | ACCEPTED: JAN 11, 2018

Plastic and Reconstructive Surgery, Nevsehir Public Hospital, Nevsehir, Turkey

Corresponding author: Murat Ucak, MD.

Plastic and Reconstructive Surgery, Nevsehir Public Hospital, Nevsehir, Turkey. Phone: +90 555 4913559. ORCID ID: 0000-0002-0164-2211. E-mail: muratucak79@hotmail.com

A Rare Case of Misdiagnosis: Recurrence of Dermatofibrosarcoma Protuberans That Was Treated Surgically as a Keloid

Murat Ucak

ABSTRACT

Aim: In this report, we presented the patient with Dermatofibrosarcoma Protuberans (DFSP), removed by considering as the keloid scar in the general surgery clinic with misdiagnosis.

Case report: The patient was a 19-year-old female student with no scar or previous trauma history in the lesion area. Pathology report of excisional biopsy revealed as a DFSP, reached-subcutis and dermis. In staging by CT, there had been no distant metastases. There was a lesion with the size of 2x1.5x1.5cm. A large resection was made to include the entire mass and the lower fascia. The defect area was repaired with a Limberg flap. There was no tumor recurrence in the first 6 months following the operation with high-level aesthetics for patient satisfaction. **Conclusion:** DFSP should be remembered in cases of operative or spontaneous keloid scarring lesions. The surgical treatment is possible after extensive resection with flap or graft repair.

Keywords: Dermatofibrosarcoma Protuberans, keloid, recurrence.

1. INTRODUCTION

A tumor called Dermatofibrosarcoma Protuberans (DFSP) is a malign mesenchymal mass, which commonly roots from the dermis (1). It develops in the form of painless, slowly growing plaques and nodules. The incidence of DFSP is about 5 million/year all over the world. Because, DFSP tends to rise slowly, tumor seldom spreads to other parts of the body in silence (2). Its risk factors remain unclear; however, surgical local excision provides an exact healing (3).

Keloids are particularly bulging after a trauma in susceptible tissues, or in the color of the skin felt hard with an examination or pinky red colored benign swelling (4). The method to be applied in the treatment is injection of suitable creams, injection into keloids, cryotherapy, radiotherapy and surgical treatment methods. As well-known, areas around the chest are common locations for keloids (5, 6). They do not usually require treatment, as they do not pose a threat to life and do not cause any serious pain or other problems outside the image. However, there are different treatment options available for keloids that make the image worse to make the person feel unhappy. This

case was one of them, who applied to the dermatologist with feeling unhappy due to the lesion around her chest. However, the missed point by the dermatologist and general surgeon was the type of this lesion that misdiagnosed and treated surgically as keloid, instead of a DFSP.

In this report, we presented the patient with a DFSP, removed by considering as the keloid scar in the general surgery clinic with misdiagnosis.

2. CASE REPORT

The patient was a 19-year-old female student with no scar or previous trauma history around the lesion area. According to the patient's verbal expression, this lesion started as a small red-pimple initially a year ago in the chest. It slowly began to grow and become conspicuous. After being evaluated by a dermatologist, the patient redirected to the general surgery department. Hence, the patient then had applied to the general surgery clinic. The general surgery had diagnosed this lesion as a keloid tissue, as described in the first examination report. Here, a fish eye incision had been performed by general surgeon and the excision had been closed primer after the surgical excision procedure. The excised tis-

© 2018 Murat Ucak

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.



Figure 1. Preoperative images of the lesion; (a) drawing border of the Limberg flap, (b) placing the flap before suture



Figure 2. Repair of the Dermatofibrosarcoma protuberans; (a) the first post-op image, (b) One month following the operation image

sue sample had been taken to the pathology department for examination. Although the pathology result report had been expecting as keloid, the report of pathology had revealed this sample as a DFSP, reached subcutis and dermis. In staging by CT, there had been no distant metastases. After all this living process, she was referred to a plastic surgery unit for assessment with a recurrence. In our first examination, there was a lesion with 2x1.5x1.5 cm in size. After giving detailed information about the surgical application, we applied surgical treatment to the patient under local anesthesia (Figure 1). A large resection was made to include the entire mass and the lower fascia. Afterwards, the defect area was repaired with a Limberg flap. Flap application was successful, while a minimal necrosis was observed. There was no tumor recurrence in the first 6 months following the operation. In addition, we provided a high-level patient satisfaction in terms of aesthetics (Figure 2).

3. CONCLUSION

Dermatofibrosarcoma Protuberans is an extremely rare condition that can be confused with keloid, especially if growing to the size of 50 mm or not healing anyway (1, 4, 5, 7). In such cases, a detailed investigation covers core biopsy and CT-imaging to achieve an exact tissue evaluation. We suggest remembering in cases of

operative or spontaneous keloid scarring lesions, and the treatment is possible after extensive resection with a flap or graft repair.

Author contribution: Author of the paper has all conceptualization of work, writing the manuscript, data interpretation, and reference checking, final proved paper.

Conflict of interest: none declared.

REFERENCES

- Ogawa R, Akaishi S, Hyakusoku H. Differential and exclusive diagnosis of diseases that resemble keloids and hypertrophic scars. *Annals of Plastic Surgery*. 2009; 62(6): 660-4.
- Kimura K, Inadomi T, Yamauchi W, Yoshida Y, Kashimura T, Terui T. Dermatofibrosarcoma protuberans on the chest with a variety of clinical features masquerading as a keloid: is the disease really protuberant? *Annals of dermatology*. 2014; 26(5): 643-5.
- Sabater-Marco V, Perez-Valles A, Berzal-Cantalejo F, Rodriguez-Serna M, Martinez-Diaz F, Martorell-Cebollada M. Sclerosing dermatofibrosarcoma protuberans (DFSP): an unusual variant with focus on the histopathologic differential diagnosis. *International Journal of Dermatology*. 2006; 45(1): 59-62.
- Elbendary A, Valdebran M, Parikh K, Elston DM. Polarized Microscopy in Lesions With Altered Dermal Collagen. *Am J Dermatopathol*. 2016; 38(8): 593-7.
- Nguyen CM, Burch JM, Fitzpatrick JE, Peterson SL, Weston WL. Giant cell fibroblastoma in a child misdiagnosed as a dermatofibroma. *Pediatr Dermatol*. 2002; 19(1): 28-32.
- Kamath NV, Ormsby A, Bergfeld WF, House NS. A light microscopic and immunohistochemical evaluation of scars. *J Cutan Pathol*. 2002; 29(1): 27-32.
- Jumper N, Paus R, Bayat A. Functional histopathology of keloid disease. *Histology and histopathology*. 2015; 30(9): 1033-57.