

The Scientific Journal of Medical Scholar

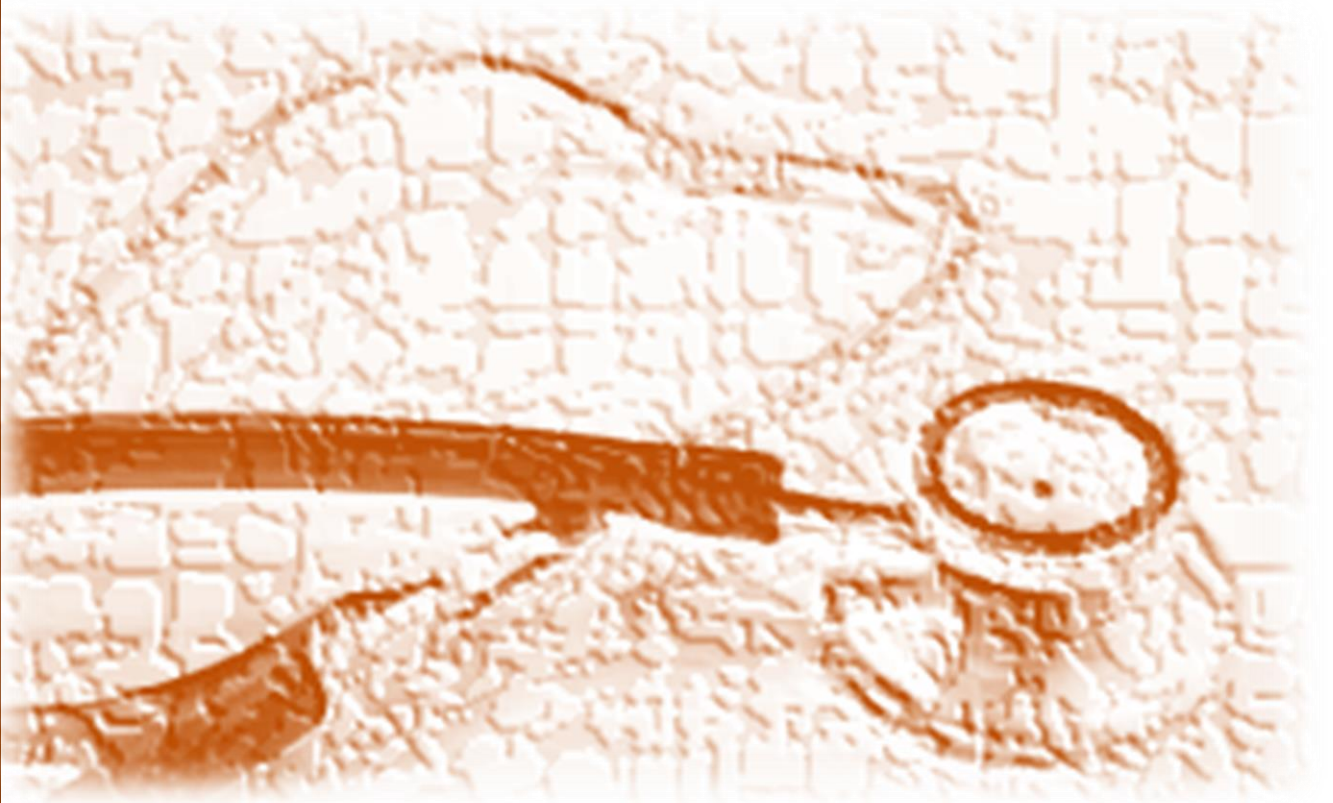


## **The Scientific Journal of Medical Scholar**

*Volume 2020, Issue 4, July 2020*

**Online ISSN: 2833-3772**

**Contact emails: [Info@realpub.org](mailto:Info@realpub.org); [Realpub044@gmail.com](mailto:Realpub044@gmail.com)**



**Online ISSN: 2833-3772**





## Case report

## Epidermal Verrucal Lesion with Velvety-Like Granular Surface at Female External Genitalia and Medial Aspect of the Thigh Compatible with Previous History of Longstanding Psoriasis : A Case Report

Ahmed M Omran <sup>1\*</sup>; Sherif H Youssif <sup>1</sup>; Ibrahim Fouda <sup>2</sup> Khaled Maher Muhammad Elagamy <sup>3</sup>; Mahmoud abdelhamid Elhendawy <sup>4</sup>; Saber M. Abdelmaksoud <sup>5</sup>

<sup>1</sup> Department of Plastic Surgery, Damietta Faculty of Medicine, Al-Azhar University, Damietta, Egypt.

<sup>2</sup> Department of Dermatology, Damietta Faculty of Medicine, Al-Azhar University, Damietta, Egypt.

<sup>3</sup> Department of General Surgery, Faculty of Medicine, Delta University, Damietta, Egypt.

<sup>4</sup> Department of Plastic Surgery, Faculty of Medicine, Al-Azhar University, Assiut, Egypt.

<sup>5</sup> Department of Plastic Surgery, Faculty of Medicine, Port Said University, Port Said, Egypt.

## Article information

Submitted: March, 30<sup>th</sup>, 2020

Accepted: May, 29<sup>th</sup>, 2020

Published: July, 15<sup>th</sup>, 2020

DOI: 10.55675/sjms.v2020i4.83

**Citation:** Omran AM, Youssif SH, Fouda I, Elagamy KM, Abdelmaksoud SM. Epidermal Verrucal Lesion with Velvety-Like Granular Surface at Female External Genitalia and Medial Aspect of The Thigh Compatible with Previous History of Longstanding Psoriasis: A Case Report. SJMS 2020 July (4): 103-105. DOI: 10.55675/sjms.v2020i4.83

### ABSTRACT

Psoriasiform dermatoses are a wide spectrum of inflammatory diseases, with several major forms represented by different clinical entities. Psoriasis is the prototype of psoriasiform dermatoses. Other conditions include pustular psoriasis, Reiter's syndrome, pityriasis rubra pilaris, lichen simplex chronicus and large-plaques parapsoriasis. These lesions represent a diagnostic challenge, both on clinical and histopathological basis. This could be attributed to overlapping clinical and histopathological features. All of them share the hyperactivity of keratinocytes leading to extensive hyperkeratosis, orthokeratosis, congestion and perivascular lymphocytic infiltration.

We presented a 25 years old female patient. She complained of epidermal verrucal lesion at the external genitalia and medial aspect of the thigh and pubic region. The surface of the skin was rough with variable velvety like granular surface from one area to another. The cut section showed marked thickening of the epidermis with upper dermal congested vessels. This lesion was compatible with the previous history of long-standing psoriasis. A wide local excision was performed with closure of the wide area with minimal scar. The specimen was sent for histopathological examination and it revealed a picture of psoriasiform dermatitis.

**Keywords:** Psoriasis; Immune-Mediated Dermatitis; Keratinocyte Proliferation; Differential Diagnosis.



This is an open-access article registered under the Creative Commons, ShareAlike 4.0 International license (CC BY-SA 4.0) (<https://creativecommons.org/licenses/by-sa/4.0/legalcode>).

\* Corresponding author

Email: [Omranplasticsurgeon@gmail.com](mailto:Omranplasticsurgeon@gmail.com)

## INTRODUCTION

Psoriasis is a chronic inflammatory disease of the skin, nails, and joints. It is typically presented as red, scaly plaques, most commonly on the elbows, knees, scalp, and lower back, but any skin surface can be involved. It is the commonest skin disease. It affects around 2% of the world's population, with increasing incidence in the last three decades. Psoriasis affects both males and females, with earlier onset in female and those with a family history. The age of onset shows a bimodal distribution with peaks at 30–39 years and 60–69 years in men, and 10 years earlier in women. The exact etiology is unknown but in general psoriasis is an immunologically mediated disease where the activation of T lymphocytes leads to the inflammation in the dermal component and secondary to the inflammatory events there is also that epidermal hyperproliferation (1,2).

Inflammatory dermatoses include a large spectrum of clinico-morphological entities. Psoriasis is the commonest form of psoriasiform dermatoses. Other conditions include “Reiter’s syndrome, pityriasis rubra pilaris, lichen simplex chronicus, and large-plaque parapsoriasis (parapsoriasis en grandes plaques)” (3,4).

Psoriasis as a prototype of inflammatory dermatoses can be recognized by inflammation and epidermal changes. The histopathological hallmark is the regular elongation of the rete ridges. This is caused by the proliferation of keratinocytes, involving the epidermis partially or totally (5,6). However, the pathogenesis is not as simple as described where psoriasis is defined as an immune mediated dermatosis of autoimmune nature. The pathogenesis is complex and still controversial but include autoimmune component and different cytokines had a role besides the role of keratinocytes and immune cells (7,8).

Other pathogenetic factors may include mycosis fungoides. In addition, cutaneous T-cell lymphoma may be presented as a parapsoriatic lesion (9-11).

Diagnosis of psoriasis is usually straightforward. However, at sometimes, it may be challenging. In these situations, the skin culture or biopsy for histopathological examination are required to confirm diagnosis (12,13).

## THE CASE

A 25 years' old female patient presented with epidermal verrucal lesion at the external genitalia and medial aspect of the thigh and pubic region. The mass was formed of abroad sheet of skin with a triangular shape measuring 12x11x6 cm (Figure 1).

The surface of the skin was rough with variable velvety like granular surface from one area to another. In addition, there was a diffuse salmon pink papules and plaques with overlying white scales on the trunk, groin, and upper and lower extremities. On the palms, we noticed punctate scaly papules with erythema.

The cut section of the vulval lesion showed marked thickening of the epidermis with upper dermal congested vessels. The lesion was compatible with the history of long-standing psoriasis.

A wide local excision with safety margin was performed (Figure 2). The defect was closed by sutures. The wound was healed without complications leaving a minimal scar with good aesthetic appearance (Figure 3).

The excised specimen had been sent for histopathological examination. The results revealed a picture of psoriasiform dermatitis. Microscopically, there was epidermal hyperplasia with acanthosis and papillomatosis.

The elongation of rete ridges was more or less regular with evenly distributed manner. The upper dermis showed dilated congested capillaries with infiltration by mixed chronic inflammatory cells. The periphery of the lesion showed similar but milder pathological features with NO malignancy.



**Figure (1):** Epidermal verrucal lesion at the external genitalia and medial aspect of the thigh and pubic region, the surface of the skin is rough with variable velvety like granular surface.



**Figure (2):** Total excision of the mass was done at the medial aspect of the thigh, lateral border of labia majora, and mid suprapubic longitudinal incision . with suturing and drain insertion.



**Figure (3):** After complete healing and recovery with complete excision of the mass, and hidden incision at the medial aspect of the thigh, lateral border of labia majora with good aesthetic appearance.



## DISCUSSION

In this case report, we describe a patient who sustained velvety like swelling on the external genitalia, and medial aspect of the thigh. We explored plausible causes of the lesion, discussed our treatment plan, and reviewed published literature to confirm the originality of this case. The decision was to excise the lesion with safety margin and send it for histopathological examination. The case was recovered without complications with satisfactory aesthetic results. The histopathology showed a psoriasiform manifestations.

Different conditions of inflammatory dermatosis share pathogenetic mechanism, mainly keratinocyte hyperactivity with severe inflammatory activity of the dermis leading to hyperproliferation of the epidermis. Other cells share in the inflammatory activity (e.g., neutrophils, dendritic cells, T-lymphocytes and macrophages) (14,15). Thus, histopathology among others constitutes the pillars of proper diagnosis. In our patient, the presence other affected areas by psoriasis with a long history of disease elevated the suspicion of diagnosis. However, malignancy (verruccous carcinoma) could not be rule out from the clinical examination. Hence, the decision to excise surgically and send the excised tissue for histopathological examination. Likely, malignancy was not identified and the condition was a form of psoriatic dermatoses. The satisfactory aesthetic results with benign nature of the mass were reflected on the patient condition.

In addition to the clinical picture of the lesion, and although history was going with verrucous psoriasis (VP), we went to surgery due to atypical presentation. It is well-known that, VP is rare, could occur de novo, highly prevalent in men, appears in friction areas in obese, diabetic patients (16,17).

Also, the diagnosis was challenging due to similarity to other lesions including verruca vulgaris, epidermal nevi, fungal infection and squamous cell carcinoma (SCC). The overlapping histopathological features add to difficulty of diagnosis (18). Furthermore, the site of the lesion is uncommon and with no previous reported cases.

All previous features of our case are unique features confined to this case.

## REFERENCES

1. El-Komy MHM, Mashaly H, Sayed KS, Hafez V, El-Mesidy MS, Said ER, et al. Clinical and epidemiologic features of psoriasis patients in an Egyptian medical center. *JAAD Int.* 2020 Jul 21;1(2):81-90. doi: 10.1016/j.jdin.2020.06.002.
2. Wick MR. Psoriasiform dermatitides: A brief review. *Semin Diagn Pathol.* 2017 May;34(3):220-225. doi: 10.1053/j.semder.2016.12.006.
3. Billings SD. Common and critical inflammatory dermatoses every pathologist should know. *Mod Pathol.* 2020 Jan;33(Suppl 1):107-117. doi: 10.1038/s41379-019-0400-z.
4. Cook LC, Hanna C, Foulke GT, Seiverling EV. Dermoscopy in the Diagnosis of Inflammatory Dermatoses: Systematic Review Findings Reported for Psoriasis, Lupus, and Lichen Planus. *J Clin Aesthet Dermatol.* 2018 Apr;11(4):41-42.
5. Garg T, Sanke S. Inflammatory dermatoses in human immunodeficiency virus. *Indian J Sex Transm Dis AIDS.* 2017 Jul-Dec;38(2):113-120. doi: 10.4103/ijstd.IJSTD\_22\_17.
6. Rajguru JP, Maya D, Kumar D, Suri P, Bhardwaj S, Patel ND. Update on psoriasis: A review. *J Family Med Prim Care.* 2020 Jan 28;9(1):20-24. doi: 10.4103/jfmpc.jfmpc\_689\_19.
7. Ayala-Fontánez N, Soler DC, McCormick TS. Current knowledge on psoriasis and autoimmune diseases. *Psoriasis (Auckl).* 2016 Feb 22; 6:7-32. doi: 10.2147/PTT.S64950.
8. Das RP, Jain AK, Ramesh V. Current concepts in the pathogenesis of psoriasis. *Indian J Dermatol.* 2009;54(1):7-12. doi: 10.4103/0019-5154.48977.
9. Pankratov O, Gradova S, Tarasevich S, Pankratov V. Poikilodermatous mycosis fungoides: clinical and histopathological analysis of a case and literature review. *Acta Dermatovenerol Alp Pannonica Adriat.* 2015;24(2):37-41. doi: 10.15570/actaapa.2015.10.
10. Bordignon M, Belloni-Fortina A, Pigozzi B, Saponeri A, Alaibac M. The role of immunohistochemical analysis in the diagnosis of parapsoriasis. *Acta Histochem.* 2011 Feb;113(2):92-5. doi: 10.1016/j.acthis.2009.12.006.
11. Gambichler T, Bischoff S, Bechara FG, Altmeyer P, Kreuter A. Expression of proliferation markers and cell cycle regulators in T cell lymphoproliferative skin disorders. *J Dermatol Sci.* 2008 Feb;49(2):125-32. doi: 10.1016/j.jdermsci.2007.07.011. Epub 2007 Sep 10. PMID: 17826963.
12. Gisondi P, Bellinato F, Girolomoni G. Topographic Differential Diagnosis of Chronic Plaque Psoriasis: Challenges and Tricks. *J Clin Med.* 2020 Nov 8;9(11):3594. doi: 10.3390/jcm9113594. PMID: 33171581; PMCID: PMC7695211.
13. Johnson MA, Armstrong AW. Clinical and histologic diagnostic guidelines for psoriasis: a critical review. *Clin Rev Allergy Immunol.* 2013 Apr;44(2):166-72. doi: 10.1007/s12016-012-8305-3. PMID: 22278173.
14. Weedon D. The psoriasiform reaction pattern, In *Weedon's Skin Pathology.* 3<sup>rd</sup> edition. Churchill Livingstone; 2010:71-91.
15. Uttarkar S, Brembilla NC, Boehncke WH. Regulatory cells in the skin: Pathophysiologic role and potential targets for anti-inflammatory therapies. *J Allergy Clin Immunol.* 2019 Apr;143(4):1302-1310. doi: 10.1016/j.jaci.2018.12.1011. Epub 2019 Jan 18. PMID: 30664891.
16. Rejeb SB, Dhaoui A, Ghachem DB, Souissi A, Bellil K. Psoriasis with verrucous appearance: a case report. *Our Dermatology Online.* 2017;8(1):63-65. doi: 10.7241/ourd.20171.17.
17. Khalil FK, Keehn CA, Saeed S, Morgan MB. Verrucous Psoriasis: A Distinctive Clinicopathologic Variant of Psoriasis. *Am J Dermatopathol.* 2005;27(3):204-207. doi: 10.1097/01.dad.0000157450.39033.31.
18. Shivers L, Montanez-Wiscovich ME. Verrucous psoriasis treated with methotrexate and acitretin combination therapy. *Cutis.* 2019;104(6): E10-E12.

The Scientific Journal of Medical Scholar



## **The Scientific Journal of Medical Scholar**

*Volume 2020, Issue 4, July 2020*

**Online ISSN: 2833-3772**

**Contact emails: [Info@realpub.org](mailto:Info@realpub.org); [Realpub044@gmail.com](mailto:Realpub044@gmail.com)**



**Online ISSN: 2833-3772**