

# *Giant keratoacanthoma-like cutaneous horn of the upper leg: A case report*

U. Wollina and J. Schönlebe

## ABSTRACT

Giant cutaneous horns are suspicious of malignancy, in particular squamous cell carcinoma. We report on a 67-year-old man that developed a giant horn on his upper leg that resembled a keratoacanthoma. The lesion was surgically removed. Histologic investigation revealed a giant verruca vulgaris. No risk factors such as immunosuppression were evident. Giant verruca vulgaris is a very rare cause of giant cutaneous horns. Complete excision is recommended in order not to overlook a malignant skin tumor in such cases.

## Introduction

Cutaneous horn, or cornu cutaneum, is a conical hyperkeratotic projection of skin with a remarkable cohesiveness of the keratotic material. They resemble animal horns at first glance. Most of them develop on face and scalp, but any part of the body can be involved.

Giant cutaneous horns are uncommon (1, 2). It has been suggested that about 40% of cutaneous horns occur as premalignant or malignant lesions (2).

Here we report a patient with a giant cutaneous horn on an unusual site – the upper leg – with various clinical differential diagnoses.

## Case report

A 67-year-old man presented with a cutaneous horn on his right distal upper leg. The tumor had been

growing for about 6 months. There was no history of trauma.

On examination a cutaneous horn of about 3 cm maximum diameter was found on the upper leg. The surrounding skin was slightly erythematous and there were enlarged capillaries close to the tumor base. The tumor was painless and resembled keratoacanthoma (Fig. 1).

A complete surgical excision with safety margins of at least 1 cm was performed. The wound healed by primary intention. The postoperative course was uneventful.

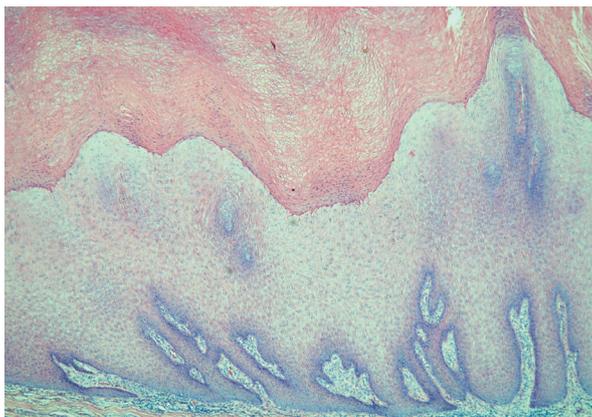
Histologic examination showed a complete symmetrical epithelial lesion. The prominent epidermal acanthosis with formation of a cutaneous horn was associated with prominent papillomatosis. Focally there was hypergranulosis with enlarged keratohyalin granules and hyperparakeratotic columns. Koilocytes were also seen. The basal membrane zone did not con-

## KEY WORDS

giant cutaneous horn, giant verruca vulgaris, squamous cell carcinoma



**Figure 1. Clinical presentation of a cutaneous horn on the upper leg: gross view.**



**Figure 2. Histologic examination of the cutaneous horn demonstrated a giant verruca vulgaris: detail (HE, x4).**

tain abnormalities. Some mitoses could be found in the basal cell layer but there were no atypical cells or atypical mitoses.

The histopathology was therefore typical for a verruca vulgaris (Fig. 2).

## Discussion

Common warts are benign epithelial tumors induced by infection with human papilloma virus (HPV). Giant verrucae vulgares are uncommon (3, 4). The one described here clinically resembled a keratoacanthoma or keratoacanthoma-like squamous cell carcinoma. The brief history of about 6 months was more likely to indicate keratoacanthoma. However,

histological examination confirmed the diagnosis of a giant verruca vulgaris.

Giant HPV tumors are most common in the anogenital area and are known as Buschke-Loewenstein tumors. They are probably related to peculiarities of the skin and the predominance of certain HPV subtypes. No risk factor has yet been identified for giant verruca vulgaris.

A complete excision of these lesions and a complete histologic analysis is important in order not to overlook major differential diagnoses such as keratoacanthoma-like squamous cell carcinoma, verrucous carcinoma, or deep mycotic infections (5–7).

1. Michal M, Bisceglia M, Di Mattia A, Requena L, Fanburg-Smith JC, Mukensnabl P, Hes O, Cada F. Gigantic cutaneous horns of the scalp.

## REFERENCES

- Lesions with a gross similarity to the horns of animals: a report of four cases. *Am J Surg Pathol.* 2002;26:789–94.
- Nthumba PM. Giant cutaneous horn in an African woman: a case report. *J Med Case Reports.* 2007;1:70.
- Xu A, Wang S, Cheng D, Wang P. A rare case of large, unusual, and mutilating verruca vulgaris with cutaneous horns treated with plastic surgery. *Cutis.* 2007;80:145–8.
- Ergün SS, Su Ö, Büyükbabanı N. Giant verruca vulgaris. *Dermatol Surg.* 2004;30:459–62.
- AlShahwan MA, AlGhamdi KM, AlSaif FM. Verrucous carcinoma presenting as giant plantar horns. *Dermatol Surg.* 2007;33:510–2.
- Thappa DM, Garg BR, Thadeus J, Ratnakar C. Cutaneous horn: a brief review and report of a case. *J Dermatol.* 1997;24:34–7.
- Boudghène-Stambouli O, Mérad-Boudia A. Maladie dermatophytique: hyperkératose exubérante avec cornes cutanées. *Ann Dermatol Veneréol.* 1998;125:705–7.

**A U T H O R S ' A D D R E S S** Uwe Wollina, MD, Department of Dermatology and Allergology and Georg Schmorl Institute of Pathology, Dresden-Friedrichstadt Hospital, Academic Teaching Hospital of the Technical University of Dresden, 01067 Dresden, Germany, corresponding author, E-mail: wollina-uw@khdf.de  
Jaqueline Schönlebe, MD, same address

# *Actinic lichen planus of unusual presentation*

A. Mebazaa, M. Denguezli, N. Ghariani, B. Sriha, C. Belajouza, and R. Nouira

---

## A B S T R A C T

Actinic lichen planus (ALP) is a distinct variant of lichen planus mainly involving teenagers with an Asian racial profile. Three clinical types of ALP have been described: annular, pigmented, and dyschromic. We report an ALP with unusual presentation in a 56-year-old woman with no relevant medical history, which was clinically suggestive of actinic keratosis. Histological findings refined the diagnosis by showing typical aspects of lichen planus. This dermatosis, which is frequent in Tunisia because of sun exposure, may cause mainly aesthetic damage and requires adequate photoprotection.

---

## *Introduction*

Actinic lichen planus (ALP), also known as lichen planus tropicus, is a rare variant of LP that typically affects children or young adults with dark skin that live in tropical or subtropical regions (1, 2). This particular form of LP generally occurs on light-exposed areas. Three clinical types of ALP have been described: annular, pigmented, and dyschromic (1, 2). We report a case of ALP of unusual presentation, mimicking actinic keratosis.

A 56-year-old female patient with no relevant medical history presented with multiple erythematopigmented and squamous patches on the face that had slowly developed over the course of 1 year. No medical history of medication use was noted. The patient had worked as a farm worker for 20 years and was chronically exposed to the sun. Dermatological exam-

ination showed skin phototype IV. The skin showed signs of aging such as wrinkles and fine wrinkles, and there were multiple erythematopigmented, mildly squamous patches on the face that evoked actinic keratosis (Fig. 1). Examination of the patient's nails and oral mucosa was normal. There was no lymphadenopathy and the patient was generally well.

Histological findings showed compact hyperkeratosis, wedge-shaped hypergranulosis, saw-toothed hyperplasia, coarse basal cell vacuolization, and Civatte bodies.

A bandlike inflammatory cell infiltrate in the papillary dermis invading the lower layers of the epidermis with liquefaction of basal cells and presence of melanin in the dermis was found (Fig. 2). Direct immunofluorescence of the exposed skin was negative. A diagnosis of actinic lichen planus was made and laboratory investigations revealed no inflammatory syn-

## **K E Y W O R D S**

actinic lichen planus, Tunisia, sun exposure



**Figure 1. Multiple pigmented patches on the face.**

drome, no antinuclear antibodies, no liver abnormalities, and negative hepatitis B and C virus serologies. The patient received topical corticosteroids of mild or intermediate level for a short time associated with sunblock. Her symptoms partially improved within 3 months with a relapse of pigmented lesions following sun exposure.

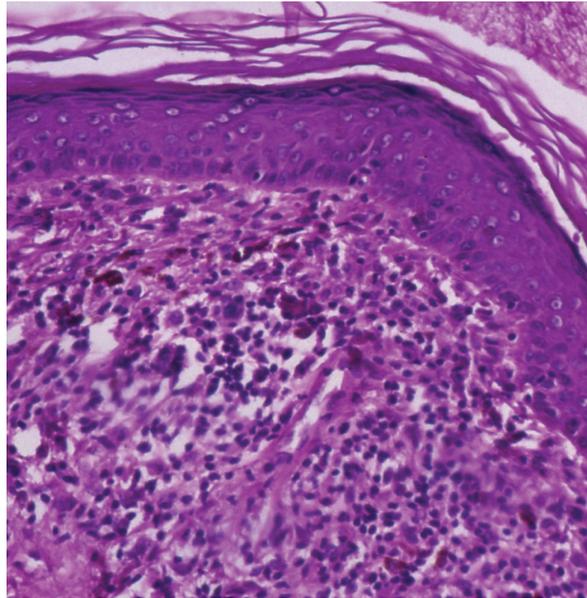
ALP is a distinct variant of lichen planus that affects mainly children and teenagers (1–4). A racial predilection to Asians with dark complexions and patients living in tropical and subtropical countries has been noted (1–5).

The eruption usually appears during spring and summer, and improvement or complete remission takes place during the winter, leaving hyperpigmented patches. However, relapses may occur during subsequent sunny seasons (1–5).

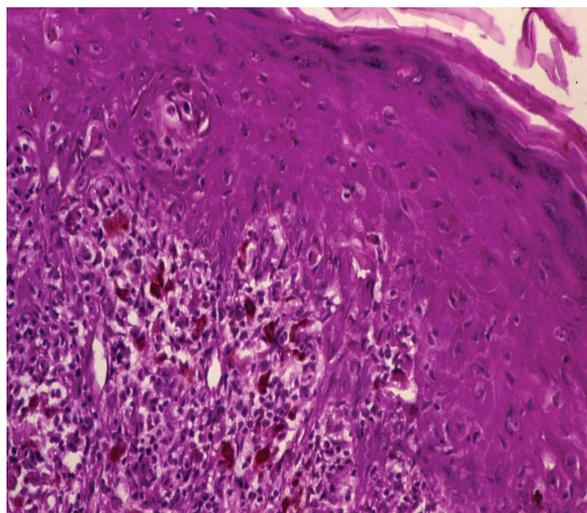
The most common form is the annular type, which consists of erythematous brownish plaques with an annular configuration, with or without atrophy. The pigmented type consists of hypermelanotic patches, with a melasma-like appearance. More rarely, the dyschromic type is characterized by whitish pinhead and coalescent papules, mainly affecting the face, neck, and dorsal hands (1–3). Our case had an unusual presentation with small, mildly infiltrated pigmented patches mimicking actinic keratosis. Histological examination refined the diagnosis by showing typical aspects of lichen planus.

The pathogenesis of ALP is still unknown. Sunlight appears to be the major precipitating factor, probably under the influence of genetic or other factors (hormonal, toxic, or infectious factors, etc.). Hepatitis viral infection (B and C) is also reported to be a trigger factor in the occurrence of ALP (3–7).

Several therapies have been tried with variable results, including bismuth, arsenic compounds, and



**Figure 2. Compact hyperkeratosis, wedge-shaped hypergranulosis, coarse basal cell vacuolization, and Civatte bodies.**



**Figure 3. A bandlike inflammatory cell infiltrate in the papillary dermis invading the lower layers of the epidermis with liquefaction of basal cells and presence of melanin in the dermis.**

topical corticosteroid preparations. Treatment with antimalarial agents or intralesional corticosteroids combined with sunscreens has shown good results with prolonged remission (6, 7).

This dermatosis may cause significant aesthetic damage requiring prolonged care and adoption of photoprotection measures.

---

**REFERENCES**

1. Denguezli M, Noura R, Jomaa B. Actinic lichen planus. An anatomoclinical study of 10 Tunisian cases. *Ann Dermatol Venereol.* 1994;121:543–6.
2. Bouassida S, Boudaya S, Turki H, et al. Actinic lichen planus: 32 cases. *Ann Dermatol Venereol.* 1998;125:408–13.
3. Salman SM, Kibbi AG, Zaynoun S. Actinic lichen planus. A clinicopathologic study of 16 patients. *J Am Acad Dermatol.* 1989; 20: 226–31.
4. Peretz E, Grunwald MH, Halevy S. Annular plaque on the face. Actinic lichen planus (ALP). *Arch Dermatol.* 1999;135(1543):1546.
5. Al-Fouzan AS, Hassab-el-Naby HM. Melasma-like (pigmented) actinic lichen planus. *Int J Dermatol.* 1992;31:413–5.
6. Meads SB, Kunishige J, Ramos-Caro FA, Hassanein AM. Lichen planus actinicus. *Cutis.* 2003;72:377–81.
7. Kim GH, Mikkilineni R. Lichen planus actinicus. *Dermatol Online J.* 2007 Jan 27;13(1):13

**A U T H O R S ' A D D R E S S E S** *Amel Mebazaa, MD, Dermatology Department, La Rabta Hospital, Dermatology Department, Rue Jabbari 1007, Tunis, Tunisia, corresponding author, Tel.: +216 2 321 8392, Fax: +216 7 157 0506, E-mail: amebazaa@yahoo.fr*

*Mohamed Denguezli, MD, Dermatology Department, Farhat Hached Hospital, Sousse, Tunisia*

*Najet Ghariani, MD, same address*

*Badreddine Sriha, MD, Histopathology Department, Farhat Hached Hospital, Sousse, Tunisia*

*Colandane Belajouza, MD, Dermatology Department, Farhat Hached Hospital, Sousse, Tunisia*

*Rafaa Nouira, MD, same address*