Successful Treatment of a Keratoacanthoma in a Young Patient with the Application of Topical 5% Imiquimod Cream

Kerasia-Maria Plachouri[1], Francesk Mulita[1], Levan Tchabashvili[1], Elias Liolis[1], Charalampos Kaplanis[1], Ioannis Perdikaris[1], Fotis Iliopoulos[1], Georgios-Ioannis Verras[1], Vasilios Tolias[1], and Sophia Georgiou[1]

[1]University General Hospital of Patras Holy Mary the Help

September 24, 2021

Abstract

Keratoacanthomas (KA) are epithelial tumors that present as rapidly evolving nodules with a central hyperkeratotic plug, and occasionally show signs of spontaneous regression. A 21-years-old patient strongly refused the diagnostic biopsy and insisted on a non surgical treatment. He was successfully treated with imiquimod 5% cream.

CLINICAL IMAGE

Successful Treatment of a Keratoacanthoma in a Young Patient with the Application of Topical 5% Imiquimod Cream

Kerasia-Maria Plachouri[1], Francesk Mulita[2], Levan Tchabashvili[2], Elias Liolis[3], Charalampos Kaplanis[2], Ioannis Perdikaris[2], Fotios Iliopoulos[2], Georgios-Ioannis Verras[2], Vasilios Tolias[1], Sophia Georgiou[1]

[1]Department of Dermatology, General University Hospital of Patras, Greece

[2]Department of General Surgery, General University Hospital of Patras, Greece

[3]Department of Internal Medicine, General University Hospital of Patras, Greece

Correspondence: Francesk Mulita MD, MSc, PhD(c), Resident Surgeon at the Department of Surgery, General University Hospital of Patras, Achaia, Greece, Tel.: +30 6982785142; E-mail: *oknarfmulita@hotmail.com*; ORCID Id:*https://orcid.org/0000-0001-7198-2628*

Key Clinical Message

Surgical excision is the most common treatment option for keratoacanthomas. However, the topical application of the imiquimod 5% cream is a safe and effective option, especially for patients who refuse surgical removal.

Case Description

A 21-year old male presented in our Department due to an asymptomatic nodule in the proximal fifth digit of the right hand, that had first appeared 3 months prior to the referral. The lesion rapidly progressed in size during the first 4 weeks and afterwards remained stable. The clinical examination revealed a firm skin-coloured nodule, of approximately 1.8 x 1.8 cm in size, with a central non-removable keratinous plug (Figure 1A). The clinical diagnosis of keratoacanthoma was made, and a biopsy was recommended for diagnosis confirmation. The patient strongly refused the diagnostic biopsy and insisted on a non surgical treatment.

We therefore suggested a regimen of topical imiquimod 5% cream under occlusion, for 5 consecutive days per week, over a period of 4 weeks. 2 weeks after treatment initiation, a prominent local inflammatory reaction could be documented, resulting in crust formation and erosion (Figure 1B). 4 weeks after the completion of treatment, the lesion was markedly flattened, until complete resolution was achieved (Figure 1C).

Keratoacanthomas (KA) are epithelial tumours that present as rapidly evolving nodules with a central hyperkeratotic plug, and occasionally show signs of spontaneous regression [1]. The treatment of choice for KAs is surgical excision, as it provides the advantage of complete tumour removal in a short period of time [1-2]. However, conservative therapeutic strategies are also to be considered, especially when it comes to the management of KAs in visible areas with a probability of cosmetic disfiguration, or when it comes to treating patients with multiple KAs [2].

Keywords: Keratoacanthomas, imiquimod cream, epithelial tumour

Patient consent for publication

A written informed consent was obtained from the patient for publication of this case report.

Conflict of interest

There are no conflicts of interest to declare.

Financial support and sponsorship

None

Author contribution

FM, EL, LT, G-IV, IP, FI, CK, VT and K-MP: contributed to the clinical data collection and prepared the case report. FM, SG and K-MP: contributed to the design of the case report presentation and performed the final revision of the manuscript.

Data availability

Data available on request from the authors

References

Pancevski G, Pepic S, Idoska S, Tofoski G, Nikolovska S. Topical Imiquimod 5% as a Treatment Option in Solitary Facial Keratoacanthoma. *Open Access Maced J Med Sci.*2018;**6** :531-535.

Janik JP, Bang RH. Traumatic Keratoacanthoma Arising in a 15-Year-Old-Boy Following a Motor Vehicle Accident. *Pediatr Dermatol.* 2006;**23** :448–450.

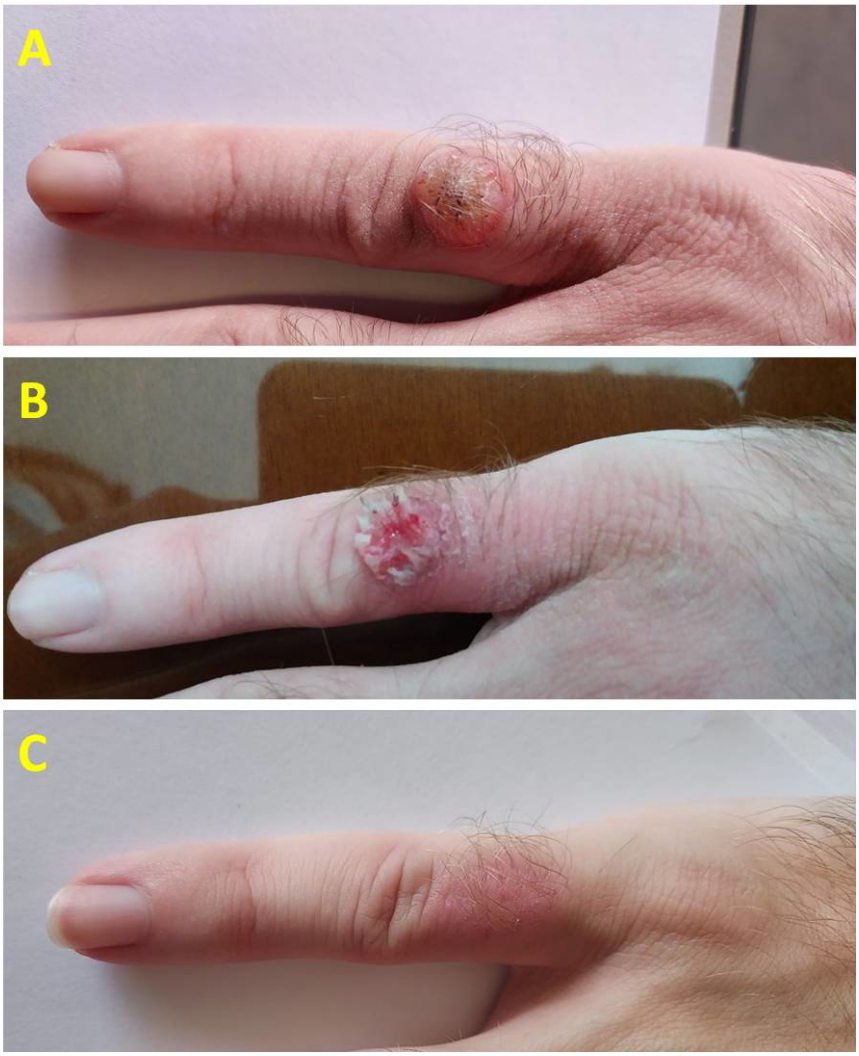

Figure 1 : A. KA in the proximal fifth digit of the right hand, before treatment B. KA in the proximal fifth digit of the right hand, 3 weeks after treatment initiation C. Complete resolution of the KA in the proximal fifth digit of the right hand, 4 weeks after the completion of treatment