

## **Puzzling Palmar Pits**

P. Finnegan, O. Molloy Department of Dermatology South Infirmary Victoria University Hospital, Cork, Ireland



## HISTORY

A 31-year-old male with Fitzpatrick skin type VI was referred to dermatology with intermittent flares of itchy dry skin on his face, ears, arms and legs. His past medical history included childhood atopic dermatitis, previous deep vein thrombosis and sickle cell trait for which he took a direct oral anticoagulant (rivaroxaban). He worked in social care. His family history was unremarkable.

## **CLINICAL FINDINGS**

On examination, numerous 2-3 mm pits were identified along both palmar creases. There was no evidence of Dupuytren's contracture or knuckle pads. The plantar surfaces of his feet were spared, with no evidence of keratoderma or pitting. The patient stated that the lesions had been present for many years and did not cause him any discomfort. The clinical findings were consistent with a diagnosis of keratosis punctata of the palmar creases.



Figure 1: Clinical photo of the patient's left hand palmar surface demonstrating KPPC

Figure 2: Clinical photo of the patient's bilateral digits demonstrating KPPC

DISCUSSION

Keratosis punctata of the palmar creases (KPPC) is a benign hyperkeratotic dermatosis.<sup>1</sup> Its aetiology is unknown, but as lesions occur at the sites of acrosyringia, it has been theorised that it may result from sweat gland pathology.<sup>2</sup> It has an estimated prevalence of 1.5-3% amongst African males, may be associated with friction, and is thought to be autosomal dominant in inheritance.<sup>1,3</sup> Typically, lesions develop during puberty with the formation of hyperkeratotic plugs which eventually break off, resulting in residual chronic pits.<sup>1</sup> Cases associated with Dupuytren's contracture and knuckle pads have been reported. The histological findings include hyperkeratotic plugs depressing the epidermis.<sup>1</sup> The soles are rarely affected. It is distinct from other palmar pit conditions, being located exclusively in the palmar creases.<sup>3</sup> This serves to differentiate it from other conditions such as verrucae vulgaris, spiny keratoderma, palmoplantar keratoderma, arsenical keratosis, and syphilitic keratosis. The management is symptomatic, and treatment options such as emollients and topical retinoids may be employed.

We report this benign condition which has an indolent nature, with no significant sequelae to the patient, which may be infrequently encountered by dermatologists in the clinical setting.

## REFERENCES

- L. Kladney, M., Johnson, S. Keratosis Punctata of the Palmar Creases. J GEN INTERN MED 33, 1582 (2018). https://doi.org/10.1007/s11606-017-4294-5
- Pierad-Franchimort, C., Pierard GE, Melotte P, Arrese-Estrada J, al Rustom K, Ekoude IS, Keratosis punctata of the palmar creases. *Ann Soc Belg Med Top.* 1989 Sep;69(3):257-61. PMID: 2532878.
  Rustad OJ, Vance JC. Punctate keratoses of the palms and soles and keratotic pits of the palmar creases. *J Am Acad Dermatol.* 1990 Mar;22(3):468-76. doi: 10.1016/0190-9622(90)70066-q. PMID: 2138179