Introduction

Bowen’s disease (BD) is a neoplastic intra epidermal (in-situ) squamous cell carcinoma for lesions sited on non-genital areas, with up to 3-5% of the cases advancing to invasive squamous cell carcinoma. The involvement of palmar skin is rarely seen as eluded in a series of 1001 cases of BD, where the anatomical location of the palm was not found once.

We describe a rare presentation of Bowen’s disease to the palm where conservative treatment resulted in a challenging palmar wound requiring complex reconstruction.

Case Report

A 65-year-old right-handed labourer presented with a 10-year history of a large, sharply demarcated, erythematous, partly hyperkeratotic plaque to his right palm and first web space. The patient's medical history was negative for arsenic exposure and HPV infection. Skin biopsies revealed Bowen’s disease of the palm that was initially managed conservatively by the dermatologists with topical application of retinoid and later 5-Fluorouracil cream.

Although initially successful, residual disease prompted a course of radiotherapy, following which the patient developed a painful chronic radionecrotic wound. This resulted to first web space contracture and exposure of both the right index finger metacarpophalangeal joint and the right flexor pollicis longus (FPL) tendon of the thumb (Fig 1).

The patient underwent surgical debridement creating a large complex palmar defect (Fig 2). The non-functional right index finger was used to reconstruct the palmar defect whereas a full thickness skin graft and a distal extensor apparatus flap based on the first dorsal metacarpal artery were recruited to cover the exposed FPL tendon and proximal phalanx of the right thumb.

Two months later the wounds healed well with good range of movement and patient returned to his daily activities (Fig 3).

Discussion

A Cochrane review and guidelines from British Association of Dermatologists analysed the evidence level for treatments commonly used for BD. The quality of evidence is strongest for PDT, topical therapies and cryotherapy. There is lack of quality data and comparative studies for radiotherapy or surgical excision of BD.

Treatment choice should take into consideration body site, healing challenges, cost effectiveness and potential functional impairment.

Conclusion

Bowen’s disease of the palm is an extremely rare clinical entity. To our knowledge, this the first case report describing complex surgical reconstruction required for this rare pathology. Given the complex abilities of the hand and the potentially devastating functional sequelae in case of treatment failure, BD located to the palm can represent a therapeutic challenge. Therefore a multidisciplinary approach with early involvement of the hand and plastic surgical team is of paramount importance.