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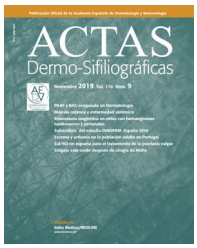

CASE AND RESEARCH LETTER

Combined Laser Therapy in a Mpox Scar

Laserterapia Combinada en una cicatriz de Mpox

To the Editor,

A 27-year-old man with no significant medical history presented to the dermatology office with a five-month-old history of a dermatosis that involved the ventral surface of his penis, the back and abdomen. Further questioning revealed a self-limited flu-like syndrome with fever and myalgias that preceded the appearance of the skin lesions, approximately 2 weeks after an unprotected sexual intercourse with another male. The dermatosis first appeared as pruriginous vesicles, evolving into an umbilicated papules that later formed a scab that fell shortly after. At that time the patient came out positive in a swab for Mpox. Physical examination found an erythematous ulcerated scar with 3 mm of larger axis with associated cutaneous retraction on the ventral aspect of the penis (Fig. 1). The patient referred pruritus and pain due to retraction at this site asking for therapy. This scar scored 8 points in the Modified Vancouver Scar Scale (mVSS). The other lesions on the body left only post inflammatory hyperpigmentation at most.

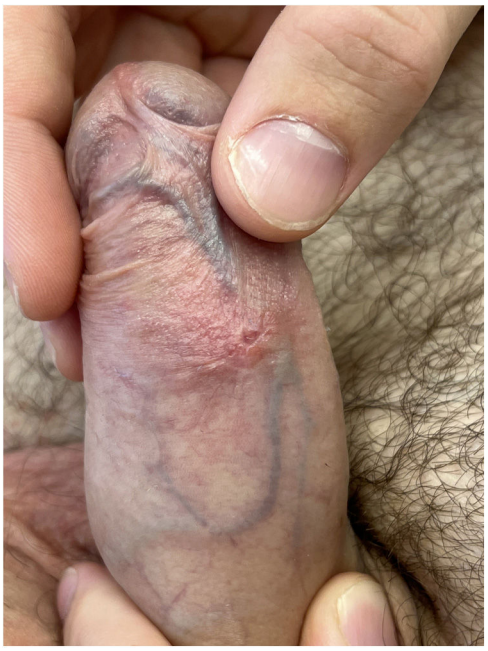

Figure 1 Patient's scar on the penis' ventral surface.

Clinical course and treatment

A combined laser therapy session was scheduled and performed around 5 months after resolution of the active lesions. Anesthesia with lidocaine 4% gel was used. The patient underwent treatment with pulsed dye laser (PDL) – (Candela's V-Beam Perfecta) associated with 1550 nm Erb-Glass (Frax1550 nm by Candela), parameterized 0.45 ms 6 J 7 mm 1 pass (PDL) and 10 mm 3.2 ms 40.0 J 3 passes (1550 nm ErbGlass), both lasers used in the same session sequentially (first PDL and ErbGlass after). The treatment lasted 10 min and was well-tolerated by the patient. The only side effects reported were pain 4/10 on the moment of treatment and swelling that lasted less than 24 h, managed with oral non-steroidal anti-inflammatory drugs.

Two months after the laser therapy, the erythema and ulceration had disappeared, leaving only a slight skin retraction in the scar location (Fig. 2) with a mVSS score of 2. The patient reported high levels of satisfaction with the cosmetic and functional results.

Comment

Mpox skin lesions can cause scarring in up to 13% of affected patients[1] and can lead to both atrophic and hyperpigmented scars.[2] Scarring may cause functional impairment and cosmetic concerns, which both may have an impact on physical and psychological health and social life (considering the stigmatization and discrimination associated with Mpox infection).[1]

General recommendations for Mpox scar prevention exist, such as skin washing with mild soap and water, avoidance of scratching and unroofing of lesion and scabs, sun protection and the use of silicone-based gels or sheeting.[3] However, the literature regarding genital scarring of any etiology and its treatment is scarce, particularly in the case of Mpox scars.

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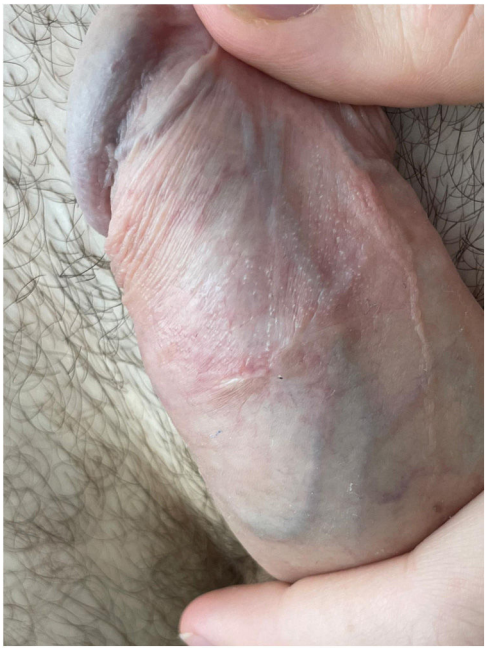

Figure 2 Lesion site two months after combined laser therapy.

PDL use has shown results in scar treatment, with improvement in erythema, texture, pliability and pain.[4] It has also shown result in hypertrophic scarring.[5] The combined treatment with PDL and 1550 nm ErbGlass has shown good results in traumatic scars.[6] However, their use in Mpox scars has not been published yet. By showing promising results in scar improvement, cosmetic and functional results and patient satisfaction with minimal side effects, this case report pretends to demonstrate the potential role of combined laser therapy in Mpox scars treatment.

Conflict of interest

The authors declare that they have no conflict of interest.

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