

Coral-Red Fluorescence of Erythrasma Plaque

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فحص تألقي بلون أحمر مرجاني لترسبات الوذح الجلدي

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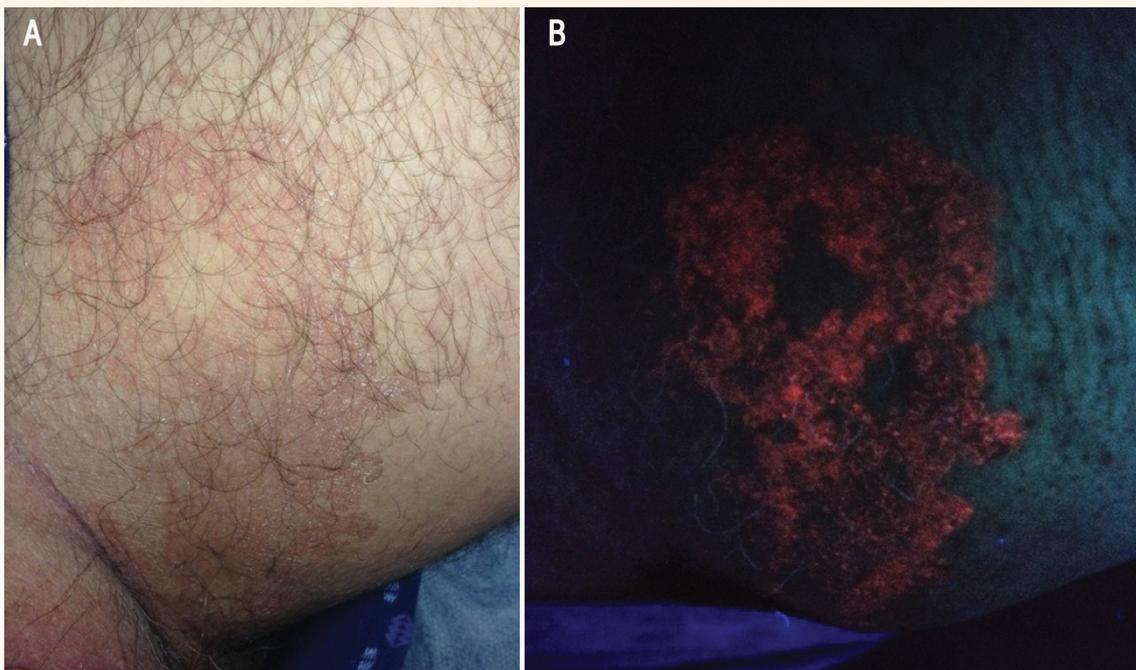


Figure 1A & B: A: Diffuse, brownish, well-defined, scaly plaque in the left inguinal region of a 50-year-old man. Note the 'cigarette paper' appearance. B: Wood's light skin examination of the plaque showing bright coral-red fluorescence characteristic of erythrasma.

A 50-YEAR-OLD MAN PRESENTED TO THE Department of Dermatology, University Hospital Complex of Granada, Granada, Spain, in 2015 with a slightly pruritic rash on the left groin, which he had had for two years. He had attended the hospital previously and been diagnosed with eczema and *tinea cruris*. This had been treated with topical steroids and antifungal drugs (methylprednisolone and sertaconazole) for several months without improvement. A physical examination of the patient showed a diffuse, brownish, well-defined, scaly plaque in the left inguinal region [Figure 1A]. A potassium hydroxide preparation of tissue scrapings was negative for fungal elements or cultures. The coral-red fluorescence of the plaque under a Wood's lamp

(WL) examination was characteristic of erythrasma [Figure 1B]. The patient was treated with 500 mg of oral erythromycin every 12 hours for 14 days, with progressive healing observed over three weeks.

Comment

Erythrasma is a localised and chronic skin infection caused by *Corynebacterium minutissimum*.^{1–3} It appears as patches that are either asymptomatic and well-defined or irregular in shape and size and red/brown in colour.^{3–5} The diagnosis is usually clinical, but a WL examination can show characteristic fluorescence due to coproporphyrin III produced by the bacteria.^{2,3} The WL emits ultraviolet A radiation with

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wavelengths between 320–400 nm and is useful in the diagnosis of disorders of pigmentation, skin infections (such as erythrasma) and porphyrias.² However, microscopic examinations (e.g. Gram staining of an epidermis scraping to reveal Gram-positive filaments and rods) and cultures on different types of media (e.g. 20% fetal bovine serum, 2% agar and 78% tissue culture medium #199) may be required in certain cases.^{4,5} A potassium hydroxide preparation of tissue scrapings can rule out concomitant infections, especially in patients with interdigital involvement.⁴ The differential diagnosis of erythrasma includes candidiasis, *psoriasis* and dermatophytosis.^{1–5} The most effective treatment is 500 mg of erythromycin twice daily for 14 days, with cure rates as high as 100%; however, other treatments with topical antibiotics and antifungals have also demonstrated good responses.^{1–5}

References

1. Klätte JL, van der Beek N, Kemperman PM. 100 years of Wood's lamp revised. *J Eur Acad Dermatol Venereol* 2015; 29:842–7. doi: 10.1111/jdv.12860.
2. Blasco Morente G, Martínez Peinado C, Martínez García E, Tercedor Sánchez J. [Wood's lamp in congenital erythropoietic porphyria]. *An Pediatr (Barc)* 2014; 81:403–4. doi: 10.1016/j.anpedi.2014.01.005.
3. Wilson BB, Wagenseller A, Noland MM. An atypical presentation of erythrasma. *J Am Acad Dermatol* 2012; 67:e217–18. doi: 10.1016/j.jaad.2012.04.004.
4. Chodkiewicz HM, Cohen PR. Erythrasma: Successful treatment after single-dose clarithromycin. *Int J Dermatol* 2013; 52:516–18. doi: 10.1111/j.1365-4632.2011.05005.x.
5. Holdiness MR. Erythrasma and common bacterial skin infections. *Am Fam Physician* 2003; 67:254.