

# Pigmented rash localised to the groins

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A man presents with an irritable, pigmented rash confined to his groins and perineal area. What is the cause?

## Case history

Over an eight-month period, a 54-year-old man noted an irritable, pigmented, slightly scaly rash confined to his groins and perineal area (Figure 1). A superficial shave biopsy demonstrated rod-like bacilli forming 'Chinese letters' in the stratum corneum (Figure 2).

## Differential diagnosis

Hyperpigmentation of the groins may be due to a number of processes.

- **Postinflammatory hyperpigmentation** may be localised to the groins. It often has an ashy blue–black appearance that may follow in the wake of inflammatory processes, such as dermatitis in individuals with dark skin.
- **Acanthosis nigricans** presents in the flexural areas, including the groins, as a velvety grey–brown pigment. Skin biopsy reveals epidermal papillomatosis with increased keratin over the surface and normal melanin pigment. Investigations may reveal insulin resistance, or more rarely acanthosis nigricans may be a paraneoplastic reaction as a sign particularly of gastric carcinoma.
- **Amyloidosis** may rarely develop in the perianal and flexural areas. It is associated with rippled pigmentation and itching. Skin biopsy will reveal deposits of amyloid in the subepidermal zone. This type of amyloid is formed from disintegrating keratinocytes that produce beta-pleated sheets of keratin fibrils.
- **Pityriasis versicolor** may be localised to the groins. It is associated with a fine scale. Skin scraping or biopsy will reveal characteristic grouped spores and short hyphal elements producing a 'spaghetti and meatball pattern'.
- **Erythrasma** is the correct diagnosis in this case. It is a result of *Corynebacterium minutissimum* colonisation of the skin. The organism can also be detected by screening the skin with a Wood's UV lamp and finding a coral pink fluorescence.

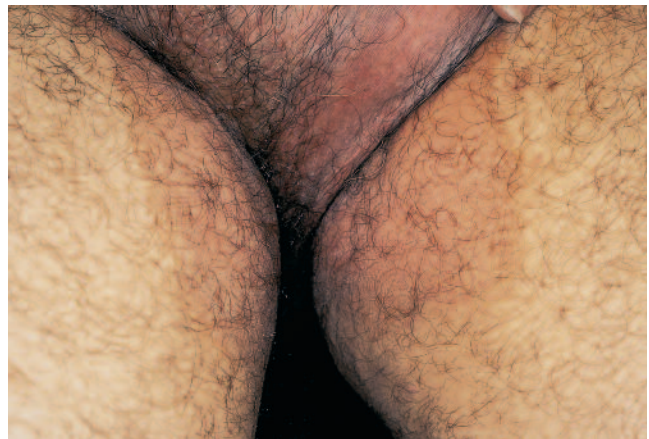


Figure 1. Pigmented rash involving both groins and perineum.

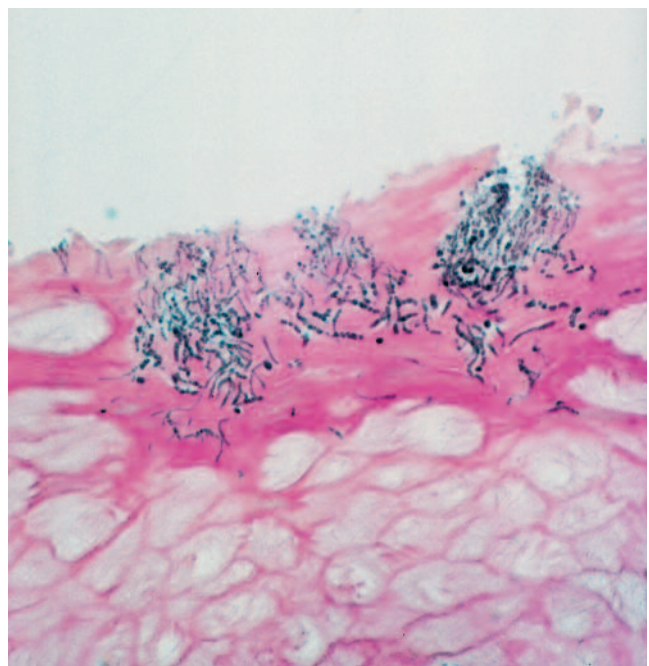


Figure 2. Stratum corneum containing numerous small rod organisms distributed as 'Chinese letters'.

## Management

Erythrasma may be treated with topical antibiotics such as erythromycin gel (Eryacne 2%) or clindamycin lotion (Clinda-Tech, Dalacin T Topical Lotion). Systemic erythromycin or clarithromycin (Klacid) is also effective.

## Keypoint

Hyperpigmentation of the groins may be produced by *Corynebacterium* species colonising the stratum corneum and is easily screened with a Wood's UV light. **MT**

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