Persistent linear plaques

BRUCE TATE PhD, FACD

What are these mildly itchy thin red plaques?

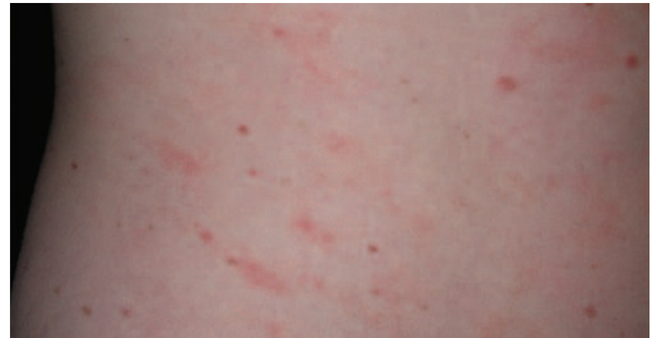

Figure. Small plaque parapsoriasis (CSD), showing red, slightly scaly thin plaques in a digitate orientation.

Case history

For eight months, a 45-year-old meat worker has had a persistent, mildly itchy rash on his abdomen, hips and proximal thighs. He reports no identifiable triggers, and he has no prior history of skin problems and no personal or family history of atopy or psoriasis. He is otherwise well, and is on no medications. On examination, red, slightly scaly thin plaques in a linear ('digitate') orientation are observed (Figure). Lymph nodes, liver and spleen are not palpable. Biopsy from two sites shows dermatitis with mild spongiosis and psoriasiform hyperplasia of the epidermis, exocytosis of lymphocytes and a perivascular and interstitial lymphocytic infiltrate of the upper dermis with no cellular atypia.

Diagnosis

The clinical and biopsy findings are consistent with chronic superficial dermatitis (CSD, also known as small plaque parapsoriasis). The terminology of this condition has been debated since it was described as parapsoriasis in 1902 by the French dermatologist Louis Brocq. The cause is not known. Key features are the somewhat digitate shaped pink patches or thin plaques, sometimes with a slight yellowish tinge. It is not itchy or only minimally itchy. CSD often persists for years, slowly moving over different sites on the trunk and proximal limbs.

Differential diagnoses

- **Adult onset dermatitis** (often idiopathic, sometimes late onset atopic) has a more variable presentation and is more itchy.
- **Psoriasis** has plaques that are more raised and sharply demarcated, and tends to have a different distribution.
- **Pityriasis rosea** settles in less than eight weeks, may have a herald patch, and the rash is often more widespread with a different pattern of scaling.
- **Dermal rashes like morphoea and granuloma annulare** (the generalised form) are smoother. Morphoea (localised scleroderma) is often slightly indurated.
- **Cutaneous T cell lymphoma** (CTCL, mycosis fungoides) can look very similar to CSD – indeed there is debate whether CSD can be a precursor for CTCL. This may well be the case for the rarer condition of large plaque parapsoriasis, where the plaques are bigger, more geographic in shape and more often in the trunk flexures, compared with CSD. In all three conditions, the infiltrate is of T-cells; the key question is which are malignant. Biopsy is the main test but requires an experienced skin pathologist as the distinction is subtle. Repeated biopsies may be needed over a few years to confirm a diagnosis. T-cell receptor rearrangement studies suggest that CTCL and large plaque parapsoriasis have clonal T-cell populations while CSD is more polyclonal. CTCL is usually a fairly indolent neoplasm of T-cells. However, some patients with CTCL develop more severe, often very itchy disease that may, through systemic involvement, go on to be fatal. Unknown antigens presumably drive the T-cells in parapsoriasis and possibly have a role in initiating CTCL. Occasional cases are caused by demonstrable contact allergens.

Dr Tate is a Dermatologist in St Albans, Vic, and with the Skin and Cancer Foundation of Victoria.

Treatment

Treatment usually suppresses rather than cures CSD. Topical corticosteroids usually settle any itching. Start with a mid-potency medication like betamethasone valerate 0.02% (Antroquoril, Betnovate 1/5 Cream, Celestone-M, Cortival 1/5 Cream) applied twice daily until the rash clears, then in bursts as needed for recurrences. If symptoms do not settle in six weeks, change to a more potent corticosteroid such as methylprednisolone aceponate (Advantan) or mometasone furoate (Elocon, Novasone). Monitor regularly to ensure no skin atrophy is developing. Some patients may require UVB phototherapy.

It is not known whether treatment prevents transformation to CTCL. Patients with CSD should be seen six-monthly whether they are being treated or not, and should be biopsied again if the signs change. The condition commonly resolves after a few years. It may, however, recur. MT

Further reading

1. Wong HK. Parapsoriasis. eMedicine, 13 Feb 2004. www.emedicine.com/derm/topic311.htm

DECLARATION OF INTEREST: None.

Downloaded for personal use only. No other uses permitted without permission. © MedicineToday 2004.