Pernio of the Hips in Young Girls Wearing Tight-fitting Jeans with a Low Waistband

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Sir,

In 1980 Beacham et al. (1) described equestrian cold panniculitis in overweight young women wearing tight-fitting uninsulated riding trousers. They developed reddish tender plaques on the thighs due to prolonged cold exposure during equestrian activities in the winter. Cold panniculitis and pernio (chilblains), which is a relatively mild form of cold injury, has also been described in children wearing cold wet shoes or boots (2) and in mountaineers after wading across rivers (3). It is especially the fat-rich hip and lateral thigh regions of young women that are affected.

The recent fashion among young women for tight jeans with a low waistband, exposing the upper part of the hip region to cold may result in hip pernio, as described in the following cases.

CASE REPORTS

Case 1

A 17-year-old girl was referred because of a bizarre persisting dusky-red plaque on her right hip (Fig. 1a). It had developed gradually during the last 2 years after she had started to wear jeans with a tight low waistband, which left the upper part of her hip uncovered, even in the winter. She had been investigated by different specialists (surgery, rheumatology and gynaecology) with no result.

She complained of a slight burning and tingling sensation of the area, which had remained unresponsive to local treatment with glucocorticoids and antihistamine tablets.

A deep punch biopsy showed sparse dilated capillaries in the upper dermis, with a modest perivascular lymphocytic infiltration. There were no changes in the fat tissue or in the epidermis. A screening test for antinuclear antibodies, cryoglobulin and cryofibrinogen was negative.

She was reluctant to wear warm covering clothing instead of the jeans. She was offered treatment with intense pulsed light (555–950 nm), 14 J/cm^2, three times with monthly intervals. With this treatment the redness was reduced, but the tingling sensation persisted.

Case 2

A healthy 15-year-old girl was readmitted because of a reddish plaque on her right hip present for about 3 years

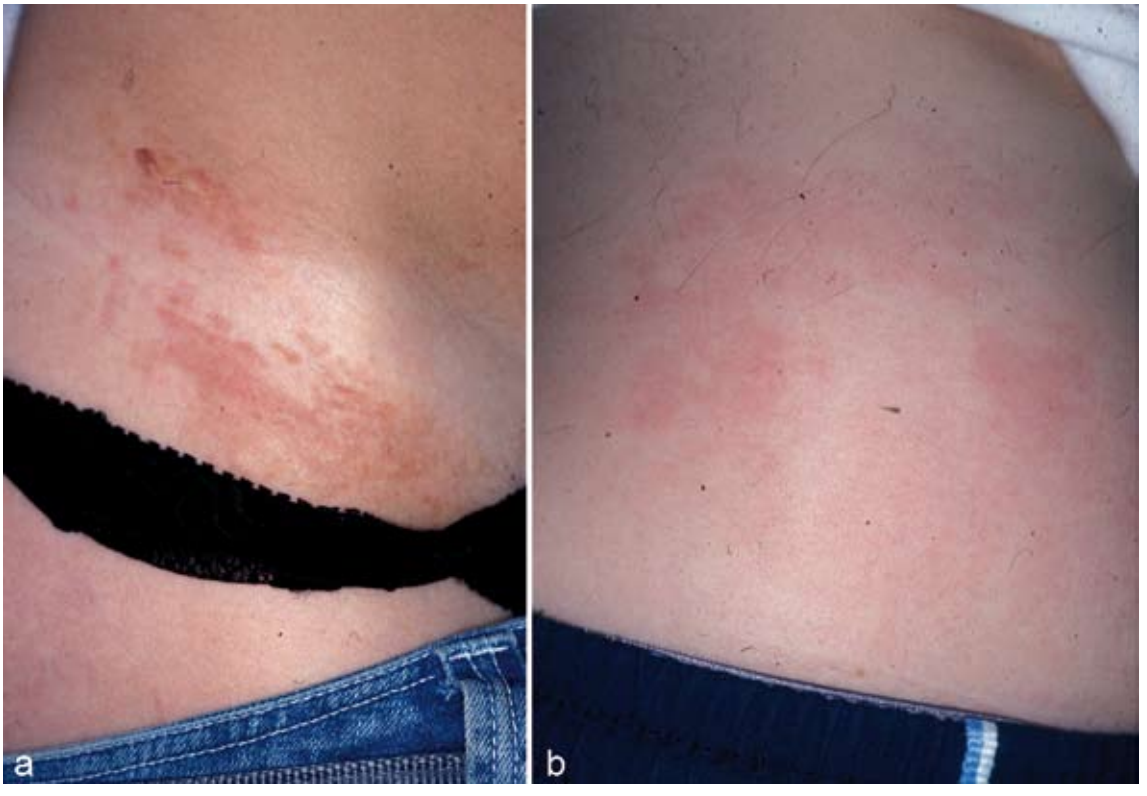

Fig. 1. Pernio on the hip in (a) case 1 and (b) case 2.

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(Fig. 1b). Two years previously she had been seen in the clinic with the same changes. As before, she complained of tingling and stinging in the area, which had been unresponsive to local glucocorticoids and emollients. The changes had developed after she began to wear tight jeans with a low waistband all year round. At the present admission she wore the same type of jeans and a diminutive undergarment as before, despite our earlier recommendation to wear warm covering clothing. She had been referred to departments of paediatrics and rheumatology with no result.

A punch biopsy showed identical modest changes as in case 1. The epidermis and subcutis were normal. A screening test for antinuclear antibodies was negative. She refused to change her dressing style. She was treated with intense pulsed light, as for the first patient, which reduced some of the red colour.

DISCUSSION

Both patients had worn tight low-cut jeans for a prolonged time, thereby exposing the skin of the hip to chronic cold injury. Perniosis often disappears after some weeks of wearing warm dry clothing, but both patients continued to wear jeans with a low waist. The tightness of the jeans may have added to the injury, by decreasing blood flow and lowering skin temperature in the hip area. Neither patient had been horse riding, skiing or exposed to prolonged cold at home or outdoors.

It remains unexplained why only one side of the hip was affected, but this has also been described in females with equestrian perniosis (1).

Perniosis is a diagnosis based on history and clinical findings. The histology is unspecific, showing various degrees of perivascular, preponderantly lymphocytic infiltrate in the superficial vessels and those of the reticular dermis and sometimes of the subcutaneous fat (4). Familiarity with the condition spares unnecessary hospital admissions and laboratory investigations of otherwise healthy patients, often females with a moderately increased body weight. In case of suspicion of panniculitis a deep excision biopsy and an antinuclear antibody to exclude the possibility of lupus panniculits is warranted.

Pernio of the hips caused by tight low-cut jeans is a new example of lifestyle-induced skin changes.

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