

Cold Panniculitis in a Child (Haxthausen's Disease) and Horse Riders Pernio

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Case 1

Cold panniculitis: A 6-month-old infant developed cold panniculitis with red indurated nodules and plaques on both of his cheeks (Fig. 1). The condition was caused by exposure to severe cold weather, as he was outside for several hours in extreme cold and windy weather in a kindergarten in Ilulissat, Northern Greenland in December.

Case: 2

Horse rider pernio. A 23-year-old woman was working in the northern part of Sweden for a stable owner. She was riding horses 6–8 times daily in very low temperatures. She was always wearing riding breeches. Suddenly she developed a slightly itchy rash on both her thighs (Fig. 2). The rash lasted for approximately 2 weeks. She recovered without sequelae.

Discussion

These two case reports describe the rarely recognized, but probably quite common condition cold panniculitis. Cold panniculitis is an acute, nodular, erythematous eruption usually limited to cold-exposed areas, which occurs predominantly in infants (1, 2).

In infants, the cheeks and forehead are areas that predominantly are affected. Cold panniculitis of the newborn has also

been associated with ice pack application (3). It results from a cold injury to adipose tissue causing inflammation and necrosis (4, 5). Furthermore, there is supposed to be a vascular injury component which causes the condition.

Cold panniculitis was first described by the Danish dermatologist, Holger Haxthausen, in 1941 (6). No racial predilection is known. During childhood and infancy, an equal incidence exists for both sexes.

The type equestrian cold panniculitis also called horse rider's pernio or equestrian panniculitis was first described by Beacham et al. (7). Cold panniculitis in horse riders is a rare phenomenon (8). Localized chilling of the tissues of the thigh, buttocks, and lower abdomen is more likely to occur in women who are obese. It occurs predominantly during the winter months because of increased cold exposure.

Heavy smoking, age less than 35 years and tight clothes worn for many hours were associated with skin symptoms (9, 10). Most published reports present only a few patients (11–13).



Fig. 1. A 6-month-old infant with cold panniculitis.



Fig. 1. A 23-year-old woman with horse rider pernio.

Cold-induced pernio has also been reported in cyclists, motorists, milk-delivery men, golf-buggy drivers, and, in the context of other outdoor activities practised in cold, wet and windy conditions (14), in both males and females (15). Pernio of the hips in young girls wearing tight-fitting jeans with a low waistband is also described in case-report (12).

Diagnosis and treatment

Cold panniculitis is a clinical diagnosis. There is no need for biopsy. The condition is treated conservatively. Firm evidence for proper treatment of cold panniculitis is lacking.

There is no need for antibiotic treatment. There is no simple method to treat or prevent cold panniculitis, except for dressing warmly.

Nifedipine, a calcium antagonist, is sometimes recommended for treatment, but the evidence to support its use is not convincing (16, 17). Topically steroids (typically group II) can reduce symptoms, but the evidence is poor. Typically the lesions are gone within one month without any treatment.

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Answers to CME on page 30–31

Case 9: 3 (starburst and globular pigment patterns, uniform negative network)

Case 10: 2 (streaming, pseudopods, blue-white areas)

Case 11: 2 (sharply demarcated red lagoons)

Case 12: 2 (abnormal pigment network at the periphery, "bird's nests")