

Jacquet's Dermatitis

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Published:

J Turk Acad Dermatol 2017; **11** (4): 17114c1

This article is available from: <http://www.jtad.org/2017/4/jtad17114c1.pdf>

Key Words: Jacquet's Dermatitis

Abstract

Observation: Jacquet's dermatitis is an uncommon variant erosive form of the primary irritant contact diaper dermatitis. It is characterized by papuloerythematous and erosive lesions with elevated borders in the genital and perianal area.

Introduction

Jacquet's dermatitis is an uncommon variant erosive form of the primary irritant contact diaper dermatitis, seen occasionally, in which a small vesicles and erosions may develop into rather characteristic, shallow, round ulcers with raised crater-like edges [1]. Jacquet's erosive dermatitis is characterized by papuloerythematous and erosive lesions with elevated borders in the genital and perianal area. The disease first described in 1951 and suggested that it is on a spectrum with granuloma gluteale infantum [2].

Case Report

Healthy 11 month age female child was seen in our dermatology department for a diaper rash, presented as perianal redness with shallow ulcerations [Figure 1]. A mixture of aluminum acetate, zinc oxide, lanolin and vaseline is prescribed for diaper dermatitis. The child's parents had used this mixture without any benefit. Then the child was seen two days later, The general erythema had improved but she had punched-out erosions and ulcerations with crater-like borders [Figures 1,2 and 3]. For the differential diagnosis herpes viral infec-

tion was considered. HSV PCR examination was found negative. A tentative diagnosis of Jacquet's dermatitis was made and treatment was initiated with emollients, clotrimazole and mupirocin cream. Also it is recommended not using diapers in the daytime. In one week the rash slowly cleared and only mild scar remained completion of treatment [Figure 4].

Discussion

Diaper dermatitis, also known as irritant contact diaper dermatitis (IDD), is an inflammatory skin eruption of the napkin area, most commonly seen in the infants between 7-12 month of age, and is relatively a common skin disease all over the world [3]. The most common form of primary irritant contact dermatitis comprises confluent erythema of the convex surfaces in closest contact with the diaper, i.e. the buttocks, the genitalia, the lower abdomen, the pubic area and the upper thighs, the deeper parts of the groin flexures are generally spared [4]. Many etiological factors are implicated combined influence of warmth, urine, moisture, friction, feces, and secondary infection [5,6].



Figure 1. Perianal redness with shallow ulcerations



Figure 2. Punched-out erosions and ulcerations with crater-like borders

Jacquet's dermatitis is a rare, distinctive, severe variant of IDD [7]. It is characterized by punched-out erosions or ulcerations with crater-like borders and is typically associated with frequent liquid stools, poor hygiene, infrequent diaper changes, or occlusive plastic diapers [8,9]. Maruani et al. defined a case with Jacquet's dermatitis which is thought to be a result of using bamboo-based diapers [10]. In our case the lesions initiate just like diaper dermatitis then in 1 or 2 days, the lesions rapidly progressed to crater like ulcers. The diagnosis of Jacquet's dermatitis is made upon the clinical signs. It is thought that the dermatitis is a result of not changing the diapers frequently by the new nanny.

The other belief is that Jacquet's dermatitis is a unique hypertrophic response localized to the diaper region due to occlusion which first appears after the first year of life. It is more common in children with chronic diarrhea or incontinence, such as those with spina bifida or Hirschsprung disease [11,12]. Rodriguez-Poblador J. et al. reported a case with Jacquet's dermatitis that occurred as a consequence of severe diarrhea following extensive

colectomy and coloanal anastomosis for Hirschsprung disease [11]. Rodriguez Cano L, et al reported two patients with Hirschsprung disease in whom severe diarrhea and a distinctive diaper dermatitis developed after delayed ileoanal anastomosis [12].

Differential diagnosis of Jacquet's dermatitis includes perianal pseudoverrucous dermatitis and granuloma gluteale infantum. Granuloma gluteale infantum presents with uniform, reddish purple oval nodules. Both can represent an unusual inflammatory response to long-standing irritation, candidiasis, or use of mid to high- potency topical corticosteroid preparations [13]. In the other differential diagnosis of this condition, the bullous and erosive type of congenital syphilis, erosive type of acrodermatitis enteropathica, langerhans cell histiocytosis, erosive herpes simplex and herpes zoster infections of the diaper area should be put in mind [14]. Silverber and Laude defined 6 year old boy with Jacquet's dermatitis was tried to be treated as false diagnosis of condyloma acuminatum with prednisolone and hydrocortisone. The lesions healed totally with only cateterization [15].



Figure 3. Punched-out ulcerations with crater-like borders



Figure 4. Mild scar remained after treatment

Treatment of Jacquet's dermatitis is similar to irritant diaper dermatitis, which includes controlling moisture. Frequent diaper changes, using diapers lined with absorbent gel materials, and application of barrier ointments are primary strategies. Inflammation tends to respond to topical antifungal/antibacterial agents. However, in severe cases oral antibiotics and corticosteroids may also be indicated [16,17]. Nasr et al. reported a 1 month old case whose lesions got worse with a basitracin therapy did not change with nystatin, hydrocortison and zinc oxide but healed completely with mupirocin and 7 day prednisolone treatment [13].

In our 11 months old case it was observed that the lesions resisted to the treatment with mupirocin mixtures but healed completely with epithelizing, antimicrobial and antifungal creams with a good care of diaper area. Jacquet's dermatitis is an uncommon variant of diaper dermatitis. We think that early diagnosis and treatment with a good care of diaper area can cause a low risk of the disease.

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