



DIAGNOSTIC CHALLENGE

Answers

Case 1

Diagnosis

Jaquet’s irritant contact napkin dermatitis.

Background

Irritant contact diaper dermatitis in the napkin area, also known as Diaper dermatitis, is the result of the combined influence of detergent remnants in the diaper, infrequent diaper change, rough toilet paper usage, feces, urine, urinary and fecal incontinence, chronic diarrhea, and secondary infection. A rare, severe form of irritant contact diaper dermatitis is Jacquet erosive diaper dermatitis, characterized by punched-out erosions or ulcerations with raised crater-like borders. Although self-healing in 4-6 months with proper management, the importance lies in its differential from other similar but serious conditions in the diaper area (Table 1).

Management of diaper dermatitis includes 1) use of loose fitting diapers, made of super absorbent breathable material, which should be changed immediately after being soiled and 2) use of barrier creams. Nonetheless, Jaquet dermatitis is challenging to treat. Topical treatment with antibiotics, antifungal, and nonsteroidal anti-inflammatory drugs and Zinc Oxide has been the main stay of treatment. Use of topical 4% sucralfate may lead to partial remission. Response to treatment is slow and the lesions heal in 4-6 months if proper precautions are taken.

Our Patient

Our patient was managed on the same lines and after two months there was almost complete healing of ulcers on anterior aspect (Figure 2a) with substantial healing of perianal lesions (Figure 2b).

Differential conditions	Important Features
Granuloma gluteal infantum	A few centimeters in size erythematous nodules, following candidial infection and use of topical corticosteroids
Perianal pseudo-verrucous papules and nodules	Few millimeter nodules and papules, with shiny, moist, bright red, flat-topped surface
Intertriginous candidiasis	Bright red plaques in the flexor area with satellite peripheral papules and pustules
Acrodermatitis enteropathica	Triad of periorificial dermatitis, alopecia, and diarrhea due to Zinc deficiency. Eczematous, scaly, or bullous lesions in the perianal region
Condylomata lata	Macerated, flat, moist, wart-like papules/plaques of secondary syphilis (possibility of child abuse)
Condyloma acuminata	Macerated, flat, moist, wart-like papules/plaques of secondary syphilis induced by genital human papilloma virus (possibility of child abuse)
Ulcerated Haemangiomas	Vascular tumors with ulceration and bleeding
Langerhans cell Histiocytosis	Persistent diaper rash; greasy, scaly plaques; erosions and ulcerations, seborrheic dermatitis-like lesions of the scalp hepatospleenomegaly , bone lesions , pancytopenia and lymphadenopathy

Table 1: Differential diagnosis of Jaquet’s irritant contact napkin dermatitis



Answers

Case 2

Diagnosis

Kawasaki disease.

Kawasaki disease affects young children. Its etiology is mostly unknown, however an uncontrolled release of cytokines as a result of some bacterial antigen, acting as a super antigen has been strongly advocated. It is characterized by prolonged fever and prominent cervical lymphadenopathy. The rash is maculopapular, with prominent involvement of limbs, hands and face. Hands develop edematous swelling and peeling of skin in the later stages (Figure 1). There is marked oral involvement, with injection of mucosae and strawberry tongue with prominent villi (Figure 2). The conjunctivae are suffused. Heart may be involved, with the development of myocarditis in the early stages and coronary aneurysms later on (Figure 3a&b). High platelet count may be associated with thrombosis and ischemic heart disease. Early treatment with a single-dose, intravenous immunoglobulin (2g/kg body weight) and high-dose of Aspirin (30-50 mg/kg body weight) or any other antiplatelet agent is very helpful in alleviating these complications, thus underscoring the importance of early diagnosis and institution of treatment. Coronary aneurysms have a tendency to resolve spontaneously over a few years.

Differential diagnosis includes Scarlet fever and viral exanthem. High degree of knowledge of the disease is required for early diagnosis and initiation of appropriate treatment.

Our Patient

Our patient had the classical findings of Kawasaki disease but despite immunoglobulin and high-dose aspirin, she developed cardiac aneurysms. This may occur in some cases but the intensity of this complication may be subdued because of treatment. The patient was asymptomatic at the time of discharge and later was lost to follow up.



Figure 2a: Almost complete healing of ulcers on anterior aspect



Figure 2b: Substantial healing of perianal lesions