Differential Diagnosis of Psoriasis

NICOLA BALATO, LUISA DI COSTANZO, and ANNA BALATO

ABSTRACT. Psoriasis is a common chronic skin disorder estimated to affect about 2% of the Western population. The disease creates a significant stigma for patients and is a major economic burden. Psoriasis has a large spectrum of clinical features and evolution. Clinical features of chronic psoriasis are generally sufficient to make the diagnosis. Diagnostic doubts, however, may arise in several clinical variants and atypical cases or when the psoriatic lesions are localized in particular sites. (J Rheumatol 2009;36 Suppl 83:24-25; doi:10.3899/jrheum.090216)

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PSORIASIS DIFFERENTIAL DIAGNOSIS

Psoriasis is a common chronic skin disorder estimated to affect about 2% of the Western population[1]. The disease creates a significant stigma for patients and is a major economic burden[2]. Chronic plaque type psoriasis is the most common form, being present in about 80% of patients[3]. Diagnostic doubts, however, may arise in several clinical variants and atypical cases, or when the psoriatic lesions are localized in particular sites[4].

GUTTATE PSORIASIS

Guttate psoriasis is characterized by the acute onset of round, erythematous, slightly scaling macules and papules over the trunk and extremities. The face could be involved. The disease is self-limiting. Flares of guttate lesions may appear during the course of chronic plaque psoriasis and can follow streptococcal infection and/or acute stressful life events[4,5]. Principal differential diagnoses include pityriasis lichenoides chronica, pityriasis rosea, secondary syphilis, and tinea corporis.

Pityriasis lichenoides chronica is a skin disease that affects both children and adults. It is typified by small scaly red-brownish recurrent papules that do not evolve into necrotic lesions and that often leave hypopigmented macules[4,6].

Pityriasis rosea commonly presents on the trunk as oval scaly papules and plaques arranged along skin tension lines in a "Christmas tree" pattern. These lesions are easily distinguishable from those of guttate psoriasis because of their appearance (they are larger, with small fine scales) and because of their distribution. In addition, pityriasis rosea usually starts with a single round or oval scaly plaque, larger than subsequent lesions, which occurs a few days to a week or more before the generalized eruption. It is self-limited in 6 to 8 weeks.

Secondary syphilis is a papulosquamous eruption that may involve the trunk, palms, and soles. Serologic testing should be performed.

Mycotic infection is often taken for the psoriatic disease and therefore treated with topical steroids. Diagnosis of mycose is based on direct mycological examination and culture[7].

PUSTULAR PSORIASIS

Pustular psoriasis (PP) is characterized by non-follicular sterile pustules, which represent the macroscopic aspect of massive neutrophil infiltration of epidermis[4]. Generalized and localized forms of PP are recognized. Patients with generalized PP may have preexisting plaque psoriasis or develop it after pustular episodes. Acute episodes of generalized PP may be triggered by irritating topical therapy or abrupt corticosteroid withdrawal[8].

Generalized PP should be distinguished from acute generalized exanthemic pustulosis, a self-limiting febrile drug reaction usually resolving in 2 weeks after withdrawal of the suspected agent, characterized by numerous small, primarily non-follicular sterile pustules, arising within large areas of edematous erythema.

Two clinical varieties of a localized form of PP are reported: acrodermatitis continua of Hallopeau and palmoplantar pustulosis. Acrodermatitis continua of Hallopeau is a chronic, painful, sterile outbreak of pustules overlying an erythematous base on one or more distal digits, with onychodystrophy, anonychia, or osteolysis of the distal phalanx. Palmoplantar pustulosis is characterized by hyperkeratosis and clusters of pustules over the ventral aspects of hands and/or feet. Differential diagnosis based on clinical appearance includes chronic bacterial, fungal or viral paronychia, secondarily infected contact dermatitis, or dyshidrotic eczema[9].

ERYTHRODERMIC PSORIASIS

The transition to a more extensive involvement, due to triggering factors, is frequently marked by the onset of an inflammatory phase, with predominant erythema and

From the Division of Dermatology, Department of Pathology, University of Naples Federico II, Naples, Italy.

N. Balato, MD, Associate Professor; L. Di Costanzo, MD; A. Balato, MD, Dipartimento di Patologia Sistematica, Sezione di Dermatologia Clinica, Allergologica e Venereologica.

Address correspondence to Dr. N. Balato, Dipartimento di Patologia Sistematica, Sezione di Dermatologia Clinica, Allergologica e Venereologica, Università di Napoli Federico II, via S. Pansini 5, CAP 80131 Napoli, Italy. E-mail: balato@unina.it

limited scaling associated with itching and rapidly progressing lesions. It may involve more than 90% of the skin surface[10].

Psoriatic erythroderma is not substantially different from erythroderma by other causes (cutaneous T cell lymphoma, pityriasis rubra pilaris).

PSORIASIS IN PARTICULAR AREAS

Diagnostic doubts may arise in scalp, face, nail, and fold area psoriasis. Lesions on the scalp are mostly asymmetrical, sharply demarcated, showing a silver white scaling, often pruritic[1]. A special variant of scalp psoriasis is known as sebopsoriasis. An underlying mycotic infection, allergic contact dermatitis, and discoid erythematous lupus should be ruled out.

Face involvement in psoriasis is more common than generally believed. Consideration of facial distribution may reflect underlying clinical characteristics of disease and influence patient counseling or therapy[11].

Oral lesions of psoriasis have been described. The differentiation from other oral diseases such as geographic tongue, fissured tongue, oral candidosis, and the oral lesions of other forms of arthritis may be subtle[12].

The frequency of nail psoriasis varies between 10% and 55%. In patients with psoriatic arthritis, a frequency of about 85% is found[13]. Characteristics of nail psoriasis include pitting of the nail plate, oil drop discoloration, subungual hyperkeratosis, onycholysis, transverse ridging, and splinting hemorrhages[5,7]. Clinical diagnosis should be completed with direct examination and bacterial and fungal cultures, useful to exclude nail infections. Sometimes, nails are clues to other systemic diseases (lichen planus, eczema).

Involvement of body folds is only estimated at 2% to 6% of patients with psoriasis[5]. Psoriasis appears as smooth, mostly very inflamed skin areas, typically with less or no scaling. It must be differentiated from other etiologies such as bacterial intertrigo, Candida intertrigo, seborrheic dermatitis and, less often, erythrasma, contact dermatitis, Hailey-Hailey disease, and flexural Darier's disease. Fungal and/or bacterial infections should be excluded. Allergologic tests can reveal allergic contact dermatitis. Skin biopsy can distinguish Hailey-Hailey disease and flexural Darier's disease.

Scaling is also reduced or absent in psoriasis of the penis. A diagnostic biopsy is necessary to exclude Zoon's plasma cell balanitis, erythroplasia of Queyrat, Bowen's disease, and extramammary Paget[3,4].

Vulvar psoriasis also requires differential diagnosis between irritant and allergic contact dermatitis, lichen sclerosus, lichen simplex chronicus, and lichen planus[14].

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