Skin diseases imitating psoriasis vulgaris

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ABSTRACT
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KEY WORDS:
psoriasis vulgaris, papular psoriasis-like rash, differential diagnosis

Symptoms of psoriasis vulgaris are papules and plaques covered with silvery-white scales, located on the elbows, knees, in the sacral region, on the buttocks and on the scalp. Usually, even without a positive family history, the disease does not cause diagnostic difficulties. However, in some cases it may be misdiagnosed. This article presents the most common skin diseases imitating psoriasis.

INTRODUCTION
Psoriasis vulgaris has been known for thousands of years. The first accounts of the disease, or actually records of the treatment, come from ancient Egyptian medical papyrus (the so-called Ebers Papyrus) [1,2]. In fact, since the very beginning, the disease has been confused, especially with leprosy. Hippocrates was the first to use the name psora. According to some sources, the term means itching, while others explain it as scale. Hence, Hippocrates classified psoriasis together with leprosy as a group of diseases with the presence of scale [3,4]. The first description of psoriasis was made by Cornelius Celsus in the first century C.E., however, he used the term impetigo. It was probably the eight century when psoriasis was distinguished from other diseases. Nevertheless, it was not until 1798 when the founder of British dermatology, Robert Willan, used the
term psoriasis to describe the disease and partlyseparator the condition from leprosy [2]. This short historical outline shows that from the beginning this dermatosis was difficult to diagnose, and was usually confused with leprosy.

The similarity of dermatoses and psoriasis is reflected in the multiple terms that exist to this day, such as: psoriasiform exanthema (exanthema psoriasiforme) in secondary syphilis, parakeratosis psoriasiformis - the former name for seborrheic dermatitis or psoriasiform subacute cutaneous lupus erythematosus and many others [5]. Typical psoriasis vulgaris, located on the scalp, elbows, knees, often nail plates, with a positive family history, generally does not cause diagnostic difficulties. Isolated psoriatic lesions, which appear for the first time in patients with a negative family history can be problematic, they are located in the area of the genitals and anus (in women in the area of the mons pubis, in men on the penis and in the anal area). In most of these cases the lesions are diagnosed as: eczema, candidiasis or Zoon balanitis.

Psoriatic lesions may be limited to nail plates. In the typical clinical picture, there is nail pitting, oily stains and onychodystrophy. Sometimes, especially in dystrophy with crumbling of the yellowish nail plate, mycosis of the nail plates is diagnosed. It is worth mentioning that a positive result of the mycological examination of the nail plate does not exclude psoriasis, because the diseases may co-occur.

SEBORRHEIC DERMATITIS AND PSORIASIS VULGARIS

Generally, lesions on the scalp may raise doubts, in seborrheic dermatitis they have the form of diffuse inflammatory exfoliation with the yellowish and oily scale opposed to the silvery scale in psoriasis. Unlike psoriasis, hair in seborrheic dermatitis is significantly thinned. Psoriasis eruptions tend to be inflammatory and sharply demarcated, they are located on the border of the scalp and smooth skin of the head, on the occiput and above the ears. The Auspitz sign is often reported because of itching or just because the patients scratch the skin. The presence or absence of itching is not a criterion for differentiating the diseases, as the symptom may occur both in psoriasis and seborrhoeic dermatitis. It is much simpler to differentiate the changes on the smooth skin, because in seborrhoeic dermatitis the lesions are located in the seborrhoeic areas, have the erythematous-papular nature with exfoliation or produce exudate. By spreading peripherally, the lesions merge to form semi-circular, irregular foci, more or less clearly demarcated. Some authors consider seborrhoeic dermatitis as a pre-psoriatic condition. Given the clinical similarity of the two diseases, the term "sebopsoriasis" is also used to describe seborrhoeic dermatitis. It is also believed that in patients previously diagnosed with psoriasis seborrhoeic dermatitis may exacerbate the symptoms through skin irritation [6].

RASH IMITATING PSORIASIS

Secondary syphilis

Unfortunately, more and more often in everyday practice we observe patients with acquired syphilis. Most of them report to a dermatologist with the advanced form of the disease, some do not notice the primary symptom or ignore it because there is no pain. Therefore, if we notice a dark red, papular, fairly cohesive rash, mainly on the trunk, face, on the palms and soles of the feet, we should use serological tests to exclude secondary syphilis. After a few weeks syphilitic rash (exanthema psoriasiforme) tends to resolve spontaneously. Superficial exfoliation is observed on the surface of the papules, initially around the periphery (so-called Biett’s collar), then on the entire surface.

Pityriasis rosea

Pityriasis rosea is another disease that may imitate psoriasis. Sometimes, the so-called herald patch, which precedes eruptions by about 14 days, very much resembles a focus of psoriasis due to its colour and exfoliation. Not all patients notice the presence of herald patch. However, careful observation and the typical course of pityriasis rosea allow for simple differentiation: around 10–14 days after the first erythematous lesion, round or oval patches cover the trunk along the axis forming a “Christmas tree”. The surface of the spots is covered with a fine, silver-grey scale. Rash usually disappears spontaneously and does not require treatment [7].
MYCOSIS OF THE SMOOTH SKIN

Mycosis of the smooth skin can mimic psoriasis. In general, this applies to the cases of undiagnosed mycosis and the first phase of the disease treated with externally applied corticosteroid preparations. Such a treatment leads to generalization of the skin lesions, which take the form of annular eruptions, with an active process at the edges of the lesions. On physical examination, we should always pay attention to the condition of the nail plates, which can be a potential habitat of the pathogen. Intense itching and the progressive nature of the disease should prompt the doctor to order a mycological examination, which will facilitate further management [8].

TUBERCULOSIS LUPOSA AND PSORIASIS VULGARIS

Although tuberculosis luposa is not common, it is even more important to remember about it. The focus resembling psoriasis is usually single, it is located on the lateral surfaces of the buttocks, breasts or on the extensory surfaces of the limbs. Skin lesions grow very slowly, because they do not itch or hurt, the patient reports to the doctor even several years after a primary lupus nodule (red-brown lesion) appears [9]. Exfoliative tuberculosis luposa is particularly similar to psoriasis due to intense exfoliation of the surface. In addition to histological examination, diascopy is helpful in differential diagnosis. A colour of the burnt sugar becomes apparent after pressing the tuberculous lesion with a cover slide.

PITYRIASIS RUBRA PILARIS (PRP) AND PSORIASIS VULGARIS

A typical clinical picture of PRP includes small, follicular erythematous salmon-coloured papules and plaques which merge into erythroderma with islets of the healthy skin. Yellowish keratoma on the palms and soles of the feet is an additional symptom of PRP. The nails show excessive keratosis and thickening. However, at the beginning, the disease rarely has a typical clinical picture. The first symptoms may include erythema with slight exfoliation on the scalp, or in children - persistent papules and erythematous patches on the elbows and knees which require differentiation with psoriasis. Co-existence of PRP and psoriasis vulgaris has also been reported [10].
PARULAR PARAPSORIASIS AND PSORIASIS VULGARIS

In parapsoriasis, eruptions in the form of numerous red-brown or red papules with delicate scales cover the trunk and limbs. From the beginning, skin changes can be numerous, but they usually do not itch. Later the clinical picture is often dominated by thick scales well attached to the base of the papules, they gradually exfoliate uncovering healthy epidermis. In some patients, especially those with a darker complexion, parapsoriasis leaves discoloration, which also resembles the natural course of psoriasis vulgaris [10].

MYCOSIS FUNGOIDES AND PSORIASIS VULGARIS

In the initial erythematous phase, cutaneous T-cell lymphoma or mycosis fungoides, is very often misdiagnosed with psoriasis [11]. Usually, very intense itching and the lack of response to externally applied corticosteroid preparations prompt doctors to order a diagnostic biopsy, which may facilitate making the final diagnosis. It is worth mentioning that before collecting specimens the skin should not be lubricated for at least 2 to 4 weeks. Pagetoid reticularis is a relatively rare variation of mycosis fungoides - this lymphoma, in the form of slowly enlarging erythematous spots covered with whitish scales, is often confused with psoriasis vulgaris. Psoriasiform eruptions in the lymphoma usually cover small areas of the skin, mainly the limbs.

BOWEN’S DISEASE AND PSORIASIS VULGARIS

Usually a slow-growing psoriasiform spot is located on the trunk or, more rarely, on the face. Skin lesions are generally single, although multifocal forms also occur. As Bowen’s disease can affect only the thumb or toe, a suspicion of psoriasis on one of the nail plates should always prompt the doctor to order a biopsy to rule out squamous cell carcinoma in situ.
NUMMULAR ECZEMA
AND PSORIASIS VULGARIS

The aetiology of the disease is unknown. Numerous or single round skin lesions resemble a coin.

SUMMARY

- Patients with the diseases described in the article are most often misdiagnosed with psoriasis vulgaris. According to many textbooks, “diagnosis of psoriasis or differential diagnosis is rarely a problem.” We agree with this statement, but only for the cases of classic psoriasis, located in typical places. Generalized dermatitis, or erythroderma is a serious diagnostic and therapeutic challenge. If the symptoms occur in a patient previously suffering from psoriasis, we should determine the cause of exacerbation. Patients with a negative psoriatic history are problematic because only in 50% of cases histological diagnostics allows to determine the cause of generalized dermatitis.
- Other forms of psoriasis may also cause serious diagnostic problems, e.g. intertriginous psoriasis (the lesions are located in the intergluteal cleft, in the armpits, groin and under breasts) or genital psoriasis with papular eruptions in men which should be differentiated with the changes in Zoon balanitis and Bowen’s disease.
- It is worth noting that the clinical picture of psoriasis vulgaris in the form of subtle exfoliating lesions on the elbows and knees accompanied by single papules on the body may be ambiguous and requires careful observation of the patient.

References:


Isolated eruptions on the limbs, torso or the dorsal surface of the hands and feet can be difficult to diagnose. However, the presence of follicles and crusts in eczema facilitates differentiation with psoriasis.


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