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Review on Rosea Diagnosis and Management Apporach in Primary Health Care Centre

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Abstract

An acute inflammatory skin condition called pityriasis rosea is characterized by papulosquamous skin lesions that develop on the trunk and extremities. Both children and adults are affected by the illness, with somewhat more females than males. The Medline, Pubmed, Embase, NCBI, and Cochrane databases were searched for studies of patients with non-alcoholic fatty liver disease. Incidence, etiology, and management options were analyzed. Pityriasis rosea has an easy-to-understand diagnostic that is mostly based on clinical features with an appropriate time course. Pityriasis rosea has no specific treatment.

Keywords: erythroderma, pityriasis rosea, pruritus, human herpes virus.

Introduction

Pityriasis rosea is a typical, self-limiting rash that often begins as a herald patch on the trunk and spreads along the Langer lines to become a widespread rash covering the trunk and limbs. Clinical and physical examination results serve as the foundation for the diagnosis. An erythematous lesion with an elevated border and a sunken core is known as a herald patch. The generalized rash will appear two weeks following the initial patch. Before or during the rash's progression, patients may have general malaise, fatigue, nausea, headaches, joint pain, swollen lymph nodes, fever, and sore throat (1). Secondary syphilis, seborrheic dermatitis, nummular eczema, pityriasis lichenoides chronica, tinea corporis, viral exanthems, lichen planus, and pityriasis rosea-like eruption linked to particular drugs are among the differential diagnoses. Antihistamines or corticosteroids are used as treatment to control symptoms. Acyclovir is sometimes used to relieve symptoms and shorten the duration of illness. For extreme situations, ultraviolet phototherapy may also be tried. Abortions that occur spontaneously have been connected to pityriasis rosea during pregnancy.

Pityriasis rosea manifests as small, scaly plaques and papules along the Langer lines (cleavage lines) over the trunk and limbs. 170 instances per 100,000 people are reported annually. Typically, people between the ages of 10 and 35 are affected (2). According to some studies, both men and women are equally affected (3). Others claim that women are more frequently afflicted. Studies indicate a higher occurrence throughout the winter, despite conflicting information regarding seasonal change (3).

Epidemiology:

Pityriasis rosea's epidemiology and clinical progression point to an infectious origin. Models based on regression analysis have demonstrated temporal case clustering, which denotes infectious transmission (4). Pityriasis rosea has not been connected to any bacterial agents (5). After intracytoplasmic and intranuclear virus-like particles

were seen by microscopy, a viral etiology was suggested. A rise in Langerhans cells and CD4 lymphocytes in the dermis also points to a viral cause (6). Human herpesvirus types 6 and 7 are the most often associated viruses with pityriasis rosea (HHV-6 and -7). Children are normally affected by HHV-6 by the age of two, whereas children are typically affected by HHV-7 by the age of six (6). Children frequently appear with roseola infantum (exanthema subitum), a common manifestation of these infections (7). The development of pityriasis rosea later in life suggests reactivation of these viruses (6).

However, there is inconsistent and limited evidence connecting HHV-6 and -7 to pityriasis rosea. Despite the fact that patients with pityriasis rosea had positive HHV-6 and -7 antibodies, early polymerase chain reaction tests did not find active viral DNA in these patients (8). In a further investigation, active HHV-6 and -7 was discovered in plasma and skin samples using a calibrated quantitative real-time polymerase chain reaction assay (9). In the peripheral blood mononuclear cells, only HHV-7 was identified. Another study detected active HHV-6 and -7 in plasma and tissue samples utilizing polymerase chain reaction testing with certain primers (10). In 71% of the 21 patients examined, electron microscopy discovered HHV particles in various stages of morphogenesis (11). Due to their inability to differentiate between an acute infection and a past illness, serologic tests have been of limited benefit (6).

Risk Factors:

Due to their changed immunological response, pregnant women are more prone to pityriasis rosea. An overall rate of 13% of spontaneous abortions was discovered in one case series of 61 pregnant patients with pityriasis rosea. Patients who experienced pityriasis rosea in the first 15 weeks of pregnancy experienced a rate of 57%. (6). Acyclovir therapy is an option, albeit additional research is required to fully understand its potential advantages.

Symptoms and signs:

Large patches of skin are frequently the first sign of pityriasis rosea, which is then followed by smaller patches or pimples. This is not always the case with pityriasis rosea. Some people experience a few noticeable skin spots. Another option is to only view bumps. The following describes what typically occurs when a person develops pityriasis rosea, despite the fact that signs and symptoms can differ (12).

Patients have described feeling ill for one or two days before a noticeable patch or rash forms on their skin.

Flu-like symptoms: One may experience a sore throat or other flu-like symptoms before to noticing any skin symptoms. The most typical symptom is a sore throat. You can also experience swelling in your neck's lymph nodes.

Other signs that may appear include exhaustion, headaches, nausea, aches and pains, fever, and difficulties sleeping (13). The earliest skin symptoms of pityriasis rosea develop when the flu-like symptoms subside. Typically, this is a single patch that gets bigger (14).

Large patches: Before the rash appears, most people only experience the development of one large patch on their skin, however this is not always the case and more patches can occasionally occur. The large patch can appear anywhere on the skin, including the armpit, but it typically appears on the back, chest, or belly. (15).

Smaller patches or bumps: smaller patches or microscopic bumps frequently occur in 2 weeks. Patches that resemble miniature herald patches frequently appear on people with light skin tones. Small, raised bumps commonly form on people with darkly pigmented skin.

The rash may resemble hives, nummular eczema, or psoriasis, among other skin conditions. It typically appears on the torso, and the belly is usually where it is most intense. Although the rash frequently appears on the chest, back, and belly, it can develop anywhere on the patient’s body, to the point of covering the whole body though this is uncommon (16). The rash gradually develops over the course of 10 to 14 days, and additional bumps or spots appear on skin. The rash stays the same: After it stops spreading, it can last anywhere from a few days to a few months.

Diagnosis:

Due to a dearth of skilled doctors who have exposure to a significant number of patients with pityriasis rosea, diagnostic criteria for pityriasis rosea have only been verified in patients of Chinese and Indian descent. The criteria are made up of pityriasis rosea's necessary, optional, and exclusionary clinical aspects. Patients who exhibit all of the necessary symptoms as well as at least one of the optional symptoms are found to have pityriasis rosea. Patients who present with any exclusional symptoms are ruled out as having pityriasis rosea. The study's authors suggested that the standards be tested and validated in additional ethnic groups (17).

Drug eruptions, tinea corporis, nummular eczema, guttate psoriasis, pityriasis lichenoides chronica, and secondary syphilis are among the differential diagnoses that are frequently regarded as rule-out diagnosis for pityriasis rosea. Barbiturates, bismuth, captopril, clonidine, gold, imatinib mesylate, interferon, omeprazole, isotretinoin, metronidazole, sulfasalazine, terbinafine, and lithium are among the medications that might result in pityriasis rosea-like eruptions. 7 Vaccinations against bacillus Calmette-Guerin, influenza, H1N1, diphtheria, smallpox, hepatitis B, and pneumococcus have all been linked to cases of pityriasis rosea (18). The typical symptom of tinea corporis, a fungal skin infection, is a single, distinct lesion with a raised, erythematous border. Examining a skin scraping from tinea corporis will reveal hyphae. Similar to psoriasis, nummular eczema manifests as one or more coin-shaped lesions that are typically restricted to the backs of the hands. Guttate psoriasis may be the first sign of a person's tendency for developing psoriasis. It typically manifests with a streptococcal pharyngitis or upper respiratory infection. The scalp and face are also affected, as are the trunk and limbs, and the lesions are pinpoint and up to 1 cm in diameter. Pityriasis lichenoides chronica, which is frequently observed on the buttocks and responds well to erythromycin, has a longer duration than pityriasis rosea. Fever and lymphadenopathy are systemic symptoms of secondary syphilis, and it also causes lesions on the palms of the hands and soles of the feet (18).

Treatment:

Self-limiting pityriasis rosea will go away in two to twelve weeks. The only indication for treatment is the intensity of the pruritus and its irritation. Pityriasis rosea has been treated with both pharmaceutical and nonpharmacological methods, including topical corticosteroids, emollients, oral antihistamines, and UV light (artifi cial or sunlight). There is evidence that taking oral corticosteroids makes symptoms worse (19). The effectiveness of oral macrolides in treating pityriasis rosea was questioned.

ANTIVIRALS

Due of its connection to HHV-6 and -7, antiviral medicines have been investigated for the treatment of pityriasis rosea. While acyclovir has fewer side effects than cidofovir (Vistide) and foscarnet, they may be more effective against certain infections (20). Acyclovir 800 mg five times daily for seven days significantly improved symptoms and lesion resolution in limited studies with fewer than 100 participants (21). Small randomized controlled studies that monitored patients for up to four weeks also found that lower doses (400 mg three to five times day for seven days) were efficient (21). Contradictory outcomes were seen in two studies that used acyclovir administered within the first week after rash onset. For severe cases of pityriasis rosea, acyclovir appears to be a viable treatment option.

PHOTOTHERAPY

Patients with pityriasis rosea who received ultraviolet B phototherapy multiple times per week for up to four weeks showed improvements in intensity and symptoms, according to two small trials (22). In a different research, 15 patients with significant illness received low-dose UVA phototherapy twice or three times per week until the rash cleared up or showed no signs of improvement (23). After the second or third treatment, the majority of patients showed measurable improvement. 12 out of 15 patients experienced less pruritus.

Conclusion:

Children and young adults are the main populations affected by pityriasis rosea, a frequent, acute, and self-limiting exanthematous skin disease. The condition is characterized by a "herald patch," which is followed by oval

erythematous squamous lesions along Langer's lines of cleavage on the trunk and proximal extremities, giving it the appearance of a "Christmas tree." It is simple to diagnose the condition when it manifests in its typical form. For the general pediatrician, the disease's clinical variations may make diagnosis difficult. For a quick diagnosis and to prevent pointless tests, understanding the disease is crucial.

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