Clinicoepidemiological study of pityriasis rosea

Sir,

Pityriasis rosea (PR) is an eruptive disorder, which is known since the 18th century. There are recent indications of its infective etiology, but its clinicoepidemiological features have not been studied well in this part of the world. Hence this study was done in S. S. Hospital, Varanasi, for a period of 15 months. The details such as cutaneous and constitutional symptoms of each patient were recorded. All the cases were investigated for blood hemoglobin (Hb), total and differential leukocyte counts (TLC, DLC), erythrocyte sedimentation rate (ESR), and venereal disease research laboratory (VDRL) test. Patients were examined for cutaneous changes at intervals of 15 days till remission, and an antihistamine was prescribed if itching was marked.

The total number of patients attending skin and VD, OPD during this period was 78,536, of which 42,028 were males; 29,929, females; and 6,579, children up to 12 years of age. The number of patients of PR was 200; thus the proportion of PR patients was 0.25%. Age of PR patients varied from 1.5 to 65 years, where mean age ± SD was 29.1 ± 20.1 years. The ages of maximum number of patients were between 13 and 36 years. Males were 133 (66.51%); and females, 67 (33.5%); including 28 children (17 males, 11 females). The male-female ratio of PR patients was 2:1, and that of OPD patients was 1.4:1. One patient presented during pregnancy. The number of patients from Uttar Pradesh was 187 (93.5%), including 117 patients from Varanasi. Thirteen patients were from the neighboring state of Bihar. There were 113 students, 32 housewives, 18 office goers, 17 businessmen, 8 farmers, 8 unemployed, and 4 were preschool children.

Cases were maximum during the 4 months from September to December; and minimum, from March to June. Itching was present in 162 patients. It was mild in 105, moderate in 53, and severe in 4 patients. Aggravation of itching was reported during night by 44 patients; on exposure to sunlight, by 17 patients; and after bath, by 8 patients.

History suggestive of upper respiratory tract infection (URTI) preceded the lesions in 35 patients, out of whom 26 had this within 1 month preceding the attack of PR; and 9, within 3 months preceding PR. Thirty-two patients had taken medicines before the appearance of the rash: 6, paracetamol; 3, ibuprofen; 3, cefadroxyl; 2, antihistamines; 2, roxithromycin. One case each took ciprofloxacin, tinidazole, doxycycline, oral corticosteroid, chloroquine, ofloxacin with an antihistamine, and dapsonse with rifampicin and clofazimine for multibacillary leprosy. Eleven patients took more than one drug, the nature of which was not known.

Before the onset of the rash, 5 patients noted pain in abdomen; 4, headache; 3, fever; and 1, joint pains. An initial lesion was noted in 141 patients. The number of patients with herald patch/es was 1 in 112, 2 in 28, and 3 in 1. The lesions were reddish brown with slight peeling of the skin. The sites varied from chest in 38 patients; abdomen, 27; back, 27; forearms, 14; thighs, 4; arms, 12; neck, 6; legs, 2; and buttocks, 1. The lesions were round or oval in shape, and the size varied from 2 to 10 cm. A few patients did not notice any initial lesion; out of them, 1 patient each took paracetamol, roxithromycin, and rifampicin with dapsonse. However, drug-induced eruptions were clinically ruled out in such patients. The interval between primary and secondary eruptions was less than 5 days in 61 patients; 6 to 10 days, in 64; and more than 10 days, in 16 patients.

Five patients gave history of eruptions similar to those of PR, once in the past. The interval was 10 months in 1 patient; 1 year, in 2; 1.5 years, in 1; and 2 years, in 1 patient. History of atopy was given by 6 patients, but history of PR-like eruptions in the family was not noted by any patient. Pallor was noticed in 5 patients; cervical lymphadenopathy, in 28; and epidermohilar single lymph node, in 1 case who was VDRL negative.

The distribution of lesions was bilateral and almost symmetrical with long axis along the cleavage lines. They were present on trunk and proximal part of limbs in 169 patients; inversus type, in 15; localized, in 9 — of which 3 were on neck, 2 on axillary fold with one arm, 2 on arm and forearm, 1 on thigh, and 1 on face. Three patients had generalized lesions; in 2 patients lesions were only on one side of the body; on groin and glutal region in 1; and flexural sites in 1 patient.

The lesions of secondary eruptions varied in size from 0.5
to 4 cm. They were slightly erythematous to light brown, multiple, discrete, oval (88% of patients) or round (5%) plaques with fine and dry scales in center and collarette at the periphery in 93% of patients. The lesions were papular in 11 patients, vesicular in 2, and follicular and target type in 1 patient each.

Hematological examination showed normal hemoglobin level in all patients. Fifty-nine patients had raised ESR. TLC was within normal limits in all patients, but 32 patients had raised eosinophil count (upper limit of normal, 8%). In patients with markedly raised eosinophil count (even up to 15%), ova and cysts were not found in stool examination. VDRL test was non-reactive in all patients.

One hundred twenty-eight patients reported for follow-up till the lesions subsided; 28 patients reported irregularly. PR subsided within 16 to 30 days in 42 patients; within 31 to 45 days in 39; 46 to 60 days, in 35; and more than 60 days, in 12 patients. There was decrease in severity of symptoms and signs on subsequent visits in most of the patients; except in a few, in whom the number of lesions or pruritus increased for the initial few weeks. The lesions subsided without scar in all, but with hyperpigmentation in 58 and hypopigmentation in 43 patients.

The proportion of PR patients in this study was 0.25 per 100 skin and V.D. patients, which is lower than that reported by others.[1]

History of URTI was noted in 17.5% of patients, which has been considered to be the time of entry of infection in patients and which may not be noted sometimes or may be subclinical.[2] Recurrence was noted by 2.5% of patients, but family history was negative in all the patients; may be because PR does not disturb the daily routine of individuals, so it might not have been noticed in the relatives by the patients. Prodromal symptoms prior to the onset of PR were reported in 65% of patients. Herald patch was noted in 70.5%, followed by secondary rash. ESR was raised in many of them, but some patients also had eosinophilia. The course of the disease was self limiting. These features are suggestive of viral etiology of the disease.[3-6]

The distribution of lesions of secondary rash in PR is bilateral, almost symmetrical along the cleavage lines well arranged with long axis of the oval lesions longitudinally. In most of the patients, the lesions are present on the trunk or proximal part of limbs; in some, the distribution is girdle type, inversus, localized, unilateral, or even segmental. Whimster stated that when there is bilateral reaction on 2 symmetrical areas on opposite sides of the body or specific segment is involved unilaterally by a disease process, there is in most patients little alternative to suggesting nervous system being responsible for symmetry or segmentation.[7] Human herpes virus (HHV) like particles have been revealed in PR on electron microscopy.[8] HHV 6 and 7 DNA has also been found in peripheral blood leukocytes and plasma in patients with PR by polymerase chain reaction.[9] Extracts of scales or blister fluid could transfer PR with typical lesions at the site of inoculation after 10 to 15 days followed by classical secondary rash.[10]

In conclusion, PR is a mild dermatosis occurring in winter mostly, in this part of the world, affecting males in the age group of 13 to 36 years and remitting within around 8 weeks.

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Erythrokeratodermia variabilis: Successful palliative treatment with acitretin

Sir,

Erythrokeratodermia variabilis (EKV) is a rare autosomal dominant genodermatosis which is characterized by the coexistence of hyperkeratotic plaques and transient erythematous patches. Irregular, variably shaped erythematous macular patches may enlarge or regress over time. Concurrently, there are persistent, well-demarcated, geographic, hyperkeratotic plaques which are distributed on the face, extensor surfaces, buttocks, trunk, and extremities. [1-3] A few clinicians have previously reported that acitretin treatment is effective.

We herein report successful use of acitretin in a patient with EKV.

A 22-year-old woman presented to our dermatology outpatient clinic with a history of generalized erythematous scaly patches and hyperkeratotic plaques. She was born to consanguineous parents, and the lesions had started at the age of a few weeks. Her first female (15-year-old) and male (7-year-old) cousins had a history of similar lesions that started at the age of 6 and 2 months respectively. Physical examination revealed multiple, irregularly shaped, erythematous scaly macular patches and hyperkeratotic plaques, located on the face, buttock, trunk, and limbs [Figure 1]. These erythematous areas had been noted to change in shape and position over time by the patient and her parents. The eruption was pruritic and getting worse in summer. She had no palmoplantar keratoderma. Scalp, nails, teeth, and mucosa were normal.

KOH preparations and cultures were negative for fungus. A punch biopsy from an erythematous scaly plaque on trunk revealed hyperkeratosis, variable degrees of acanthosis, and perivascular lymphocytic infiltrate in upper dermis and dermal papillae. On the basis of the history and clinical findings, a diagnosis of EKV was made.

Initially the patient was treated with topical corticoid ointment and 4% urea emulsion twice daily for 4 weeks, but no improvement was seen. Thereafter, treatment with acitretin 35 mg/d (equivalent to 0.5 mg/kg) was initiated. Four weeks later, her lesions had become more pruritic and she complained of xerosis due to acitretin therapy. The dose was then reduced to 25 mg/d, which she continued for 5 months. Tablet loratadine 10 mg/d and 4% urea emulsion twice daily were added to the therapy, after which the patient tolerated the treatment very well. A moderate improvement was observed at the end of the third month of therapy. Monthly checks of complete blood count, liver function, and serum lipids were normal throughout acitretin treatment period. Acitretin dose was reduced to 10 mg/d after 6 months and continued for an additional 3 months. Seven months after initiating the treatment, the patient’s skin remained lesion free [Figure 2]; and the therapy was stopped at the ninth month of treatment. The therapy was discontinued, followed by a rapid recurrence of the EKV lesions within 2 weeks. Intermittent treatment during the summer months is planned.

EKV, described by Mendes da Costa in 1925, is a rare autosomal dominant genodermatosis that usually appears within the first year of life but may arise later in childhood. [1,2] The clinical picture consists of irregularly shaped erythematous patches and hyperkeratotic plaques. The erythema may be accompanied by some fine scaling. Geographic, hyperkeratotic plaques are usually persistent, but the erythematous component may change in shape and position over time.[2,3]

The histopathological findings of EKV are nonspecific; the diagnosis depends on the clinical features and family history. Under light microscopy, nonspecific hyperkeratosis with variable degrees of acanthosis, papillomatosis, parakeratosis, and mild perivascular lymphocytic infiltrate is seen.[2]

Emollients, topical retinoic acid, 5% lactic acid, intralesional steroids have been used in the therapy of EKV. Treatment of EKV with oral etretinate and isotretinoin has been well documented in the literature.[4,5] To our knowledge, only 2 case reports of successful use of acitretin in the treatment of EKV have been published.[6,7] van de Kerkhof et al. noted sustained improvement using acitretin at the dose of 25 to 35 mg daily, but reduction of dosage resulted in a relapse.

References