Case Report - Erythroderma - Due To Infantile Seborrheic Dermatitis (Leiner’S Disease?)

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Abstract: Neonatal or infantile erythroderma is a rare condition. The causes of erythroderma in this age group are different from that in adult and difficult to establish due to poor specificity of clinical and laboratory findings. It requires urgent attention as it can become life threatening if misdiagnosed or mismanaged.

Keywords: neonate , infant , erythroderma , leiner’s disease, biotin

I. Introduction

Erythroderma is an inflammatory skin disorder consisting of erythema and scaling affecting more than 90% of the body surface. Primary erythroderma arises on normal looking skin due to the underlying systemic disorder or because of a drug reaction while the secondary erythroderma arises from a pre-existing dermatoses. In erythroderma, there is an increase in the rate of epidermal cell turnover. The transit of the cells through the epidermis is shortened. Hence, a greater amount of cell components is lost from the skin surface in the form of scales. Approximately, 20-30 g of scales per day is the loss. The amount of protein loss is so large that the systemic metabolism is affected.[2] Hence, it is important to prevent erythroderma in children. According to a retrospective study done by Pruszkowski et al (2000) erythroderma in infants is 20% due to papulosqamous diseses and 10% due to infantile seborrheic dermatitis as Sarkar et al (2001) study.

Case Report -

A , 3 months old male baby presented with generalized exfoliation and erythema all over the body with thick greasy crusts on the scalp also involving face since 15 days , he was unable to take breastfeed properly . he had history of seborrhea 1 month after birth, mainly on head and face which later progressed into erythema and exfoliation involving almost entire body surface . Erythema was more marked on face, trunk and diaper area.

He was born after an uneventful pregnancy and delivery as the first child of healthy unrelated parents . There was no any history of bullous formation or ichthyosis in the past in the baby or family members , but there was history of loose motion for few days .

On examination-

Scalp and face - Thick , yellowish-brown moist greasy looking crusts were present on scalp and and entire face including pre, post , infraauricular , ear and upper labial area .there was comparatively sparing of infralabial and central mandibular area ( fig:1 and fig : 3).

Trunk- mild brownish scales associated with erythema was present on preternal , interscapular and lower abdomen . scaling was more marked on upper chest, middle part of trunk was comparatively normal . In the preternal area lesion was in hemi-circinate pattern.

Limbs - thick , yellow- brown scales associated with erythema was present on both upper and lower limbs including hands and feet.

flexures- The inguinal, perianal and axillary folds were erythematous , scaling was not present in flexures except mild greasy scales over the scrotal area . Mild scales were present over anteromedial aspect of thigh (fig:2).
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Fig 1: generalized scaling and erythema over whole body. Fig 2: comparative absence of scales in flexure.

Other findings -
There was bilateral corneal opacity, mild microcephaly (head circumference: 38.86 cm, Z score: -1.9, percentile: 2.8, less than 3 percentile HC for given age and sex is suggestive of microcephaly), high arched palate.

Fig 3: thick yellowish brown crusts present over face and also showing high arched palate.

II. Discussion
Presence of yellowish greasy crusts and scales associated with erythema in seborrheic areas is suggestive of seborrhoeic dermatitis. Erythema and scaling involving whole body progressed into erythroderma with underlying disease infantile seborrheic dermatitis.

Severe seborrhoeic dermatitis of the scalp and face, scaling and erythema on the trunk and limbs, corneal opacity, microcephaly, high arched palate and history of diarrhoea and fever is seen in Leiner’s disease which occurs due to C5 deficiency (immunodeficiency), biotin deficiency. There will be failure to thrive, low birth weight.

Treatment of infantile seborrhoeic dermatitis erythroderma consist of hospitalization and temperature regulation, hydration and emollients. Exclusive breastfeeding should be encouraged.
References:
