

Case of Severe Infantile Seborrhoeic Dermatitis (The Cradle Cap)

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ABSTRACT

The term infantile seborrhoeic dermatitis is used to describe as apparently particularly eczematous or psoriasiform eruption seen in infants, having a fondness for the scalp and flexures, and can be compared with atopic dermatitis. This is a very common problem in neonates. We reported a 20th-day-old male neonate brought to us with his mother having complaints of yellowish greasy scales with thick greenish crust on them. Lesions were present on the scalp and the face.

Keywords: *Atopic dermatitis, cradle cap, infantile seborrhoeic dermatitis, neonates, psoriasiform eruption.*

INTRODUCTION

Infantile Seborrhoeic Dermatitis (ISD) is a very common disease, but the exact cause of this disease is not known [1]. Most of the time this disease goes away without any remedy but sometimes it can be worst. Patients' parents mostly consider this disease as life-threatening as it looks really scary in the first place. There are so many hypotheses about the etiology and among them the influence of circulating maternal hormones resulting in overactivity of the sebaceous glands which produces more sebum and overproduction of the sebum causes dead corneocytes to remain adherent instead of desquamation and because of excessive sebum yeast start growing as they break down sebum consuming fatty acid are most supported one [2].

CASE REPORT

A 20th-day-old male neonate was brought to us with his mother complaining of yellowish greasy scales with thick greenish crust on them. The patient was crying and restless. These scales were present all around the scalp, face, eyes and behind ears. The remaining body areas were spared. We exclusively exclude HIV in the patient *via* HIV antibody testing in the neonate [3]. When the patient was born he did not have any lesions but from the 4th-day lesions slowly started as small vesicles on the scalp [4]. The mother told us that patient was very restless and crying a lot. The sleep cycle of the patient was also disturbed. The patient was also having a mild fever. The mother of the patient was very concerned. The mother informed us that in the last two pregnancies her kids did not develop infantile seborrhoeic dermatitis.

In **Fig. (1A-1C)** it has been appreciated that patient's scalp and face were grossly erythematous, full of yellowish grayish scales, thick plaques, and greenish crust stick on it.

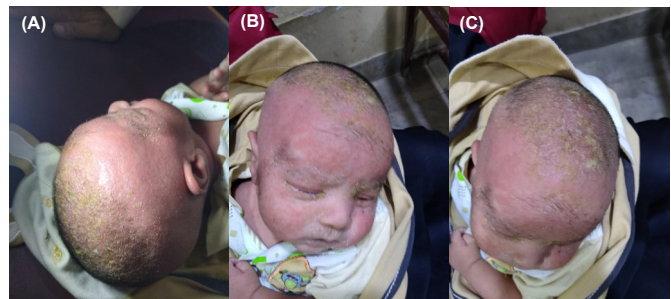


Fig. (1): (A) shows erythema and crust on scalp (B) shows erythema, greasy scales and crust around eye and scalp (C) shows erythema and greasy crust on scalp.

DISCUSSION

ISD is very common among newborns [5, 6]. It can have a variety of different causes. The exact cause is unknown but many scientists believe the influence of circulating maternal hormones resulting in overactivity of the sebaceous glands which produces more sebum and overproduction of the sebum causes dead corneocytes to remain adherent instead of desquamation and because of excessive sebum yeast start growing as they break down sebum and start consuming fatty acid and converting into un-saturated fatty acid. The algorithm for a better understanding of the cause of ISD is in **Fig. (2)**.

It has been evident that around 27% of patients who had infantile seborrhoeic dermatitis developed atopic dermatitis in the future [7]. It has been seen that *Pityrosporum ovale* (*P.ovale*) increased in frequency of patients having infantile seborrhoeic dermatitis. *P.ovale* is only found as normal skin flora in adults but rare in prepubertal children but increased frequency

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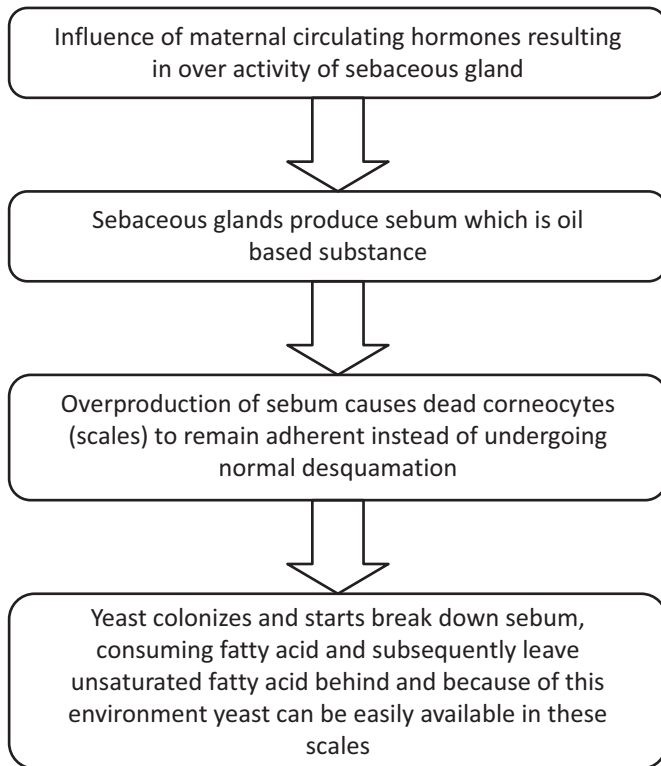


Fig. (2): Shows etiology of Infantile Seborrhoeic Dermatitis.

of *P.ovale* in newborns shows some relation with ISD. In histopathology of infantile seborrhoeic dermatitis direct immunofluorescence has been negative, poorly developed granular layer with moderate acanthosis (often psoriasiform), occasional lymphocytes, slight spongiosis, and parakeratosis always presents with epidermal vesicles. The dermis features a mild, patchy perivascular lymphocytic inflammatory infiltrate and prominent perivascular edema. The lesions generally developed in between the 2nd week of life and the 6th month, but mostly in between the 2nd and 8th week. It started on the face and scalp. It tends to involve the scalp, trunk, face, neck, and napkin area rapidly on the face nasolabial folds, forehead, eyebrows, and eyelids affected most. The rash of infantile seborrhoeic dermatitis comprises of scaling with tiny vesicles, erythema and will be coalescing to form a pattern, scales are mostly adherent, they are yellow-brown and greasy in color. Itching can vary from mild to extreme and patients can react from smooth sleeping to extreme crying because of severe itching. Infantile seborrhoeic dermatitis should be differentiated from a few diseases including, intertrigo, irritant napkin dermatitis, atopic dermatitis, infantile psoriasis, zinc deficiency, and primary immunodeficiency. In a few cases, infantile seborrhoeic dermatitis can be a reflection of psoriasis in the patient. Langerhans' cell histiocytosis may present with an eruption having features in common with infantile seborrhoeic dermatitis however careful examination will demonstrate the papules erupted are mostly flesh-colored. The prognosis of this disease is very satisfying. Mostly it will subside by itself and in case of severe disease then few treatment

options should be used. In most cases, the treatment is similar to atopic dermatitis. The patient should be bathed daily from bath oil. Emulsifying creams should be used with topical usage of antifungals [8]. Soap should be avoided. The topical application with 2% salicylic acid and mild steroids is very helpful.

CONCLUSION

Infantile seborrhoeic dermatitis is very common among newborns but in a very mild fashion. The severity of this condition is very rare. Infantile seborrhoeic dermatitis is not contagious and not a life taking disease but it seems a very dangerous disease to parents of newborns and parents do start panicking and start assuming that this disease can cause death, proper counseling is needed to the parents and do inform them properly that do not try to scratch off the crust or the lesion it's because it can cause oozing of blood and provide passage to enter the infection more inside the lesion. This condition should be properly treated with the standard treatment of providing moisturizers, daily bathing with oil, and sparing of soaps.

CONSENT FOR PUBLICATION

Written informed consent was taken from the patient's parents for reporting this case.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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