

# COLLODION BABY: NON BULLOUS ICHTHYOSIFORM ERYTHRODERMA — A CASE REPORT

INAM ULLAH KHAN, IRSHAD HAKIM AND  
MAIRAJ MOHAMMAD KHAN KHATTAK

*Department of Dermatology,  
Postgraduate Medical Institute,  
Lady Reading Hospital, Peshawar.*

## INTRODUCTION

Collodion baby is a condition in which infants are born with a distinctive, tough, inelastic collodion like membrane covering their bodies. The membrane eventually fissures and is shed, usually revealing a characteristic Ichthyosiform abnormality.<sup>1</sup>

We describe a case in which this condition evolved into Non-Bullous Ichthyosiform Erythroderma. This is the first case report of this disorder from North Western Frontier Province (N.W.F.P) of Pakistan.

## CASE REPORT

A female infant of one year age was brought to the skin department of Post Graduate Medical Institute, Lady Reading Hospital, Peshawar. According to the parents, she was covered with a reddish shiny covering at the time of birth. After a week, cracks developed in this covering which shed later on. At the time of birth, she had deformity of eyes, ears and mouth which has not improved since then. Parents were Afghan refugees and first cousins.

On examination, the infant had generalized hyperkeratotic, fissured

scaly skin with diffuse erythema, there was diffuse loss of scalp and eyebrow hairs. She had bilateral ectropion, eclabium and small, deformed ears (Fig. 1 & 2).

Infant was otherwise healthy with no systemic abnormalities. Routine blood, urine examination and X-ray chest were within normal range.

Skin biopsy showed hyper-keratosis, patchy parakeratosis, normal granular layer, acanthosis, mild spongiosis and regular elongation of rete ridges. There was a mild perivascular lymphocytic infiltrate in the upper dermis (Fig. 3).

On the basis of history, clinical examination and investigations, a diagnosis of collodion body leading to Non-bullous Ichthyosiform Erythroderma was made.

## DISCUSSION

The term collodion baby has previously been used both for Ichthyosis fetalis and lamellar exfoliation of the new born.<sup>2</sup> this concept still persists<sup>3</sup> although some use the term lamellar Ichthyosis of the new born for those cases in which the skin of the collodion babies become eventually normal.<sup>4</sup>



Fig.1. NON BULLOUS Ichthyosiform Erythroderma Showing Erythema, scaliness and Alopecia.



Fig. 2. NON BULLOUS Ichthyosiform Erythroderma Showing Ectropion, Eclabium, deformed ears and marked Erythema with scaliness.

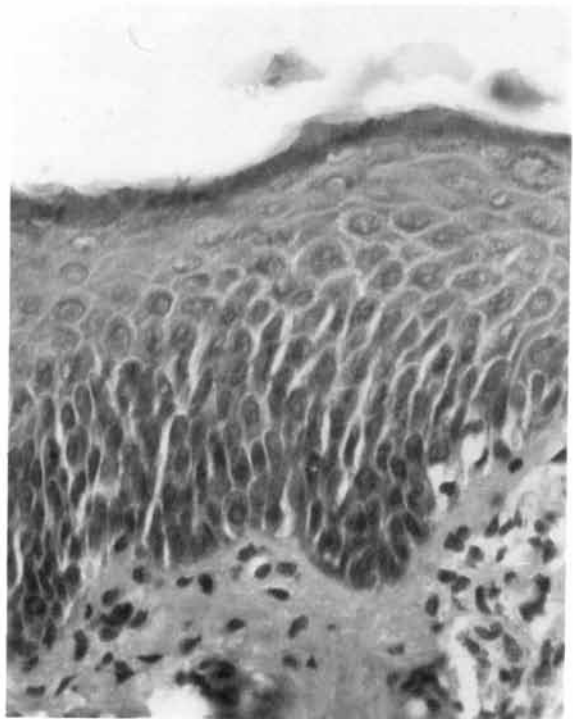


Fig. 3. Skin showing normal granular layer, acanthosis, spongiosis and mild lymphocytic infiltrate in the upper dermis. H & E x 200

However, it has been suggested that such cases can be called transient lamellar desquamation of the new born.<sup>3</sup>

The collodion baby precedes the development of Non-bullous Ichthyosiform Erythroderma or lamellar Ichthyosis<sup>3</sup>, both of which are Autosomal recessive disorders. Occasionally it precedes the development of other rare disorders like tricho-thiodystrophy-ichthyosis syndromes, Ichthyosis vulgaris, x-linked ichthyosis, Nethertons syndrome and Gauchers disease<sup>1,3</sup>.

Our case is the classical example of collodion baby preceding the development of Non-bullous Ichthyosiform Erythroderma. We could only differentiate it from lamellar Ichthyosis with the help of histopathology<sup>1</sup>. Ectropion, deformity of ears and sparsity of scalp hair are said to be very mild in Non-bullous Ichthyosiform Erythroderma<sup>1</sup>. However, in our case it was

more marked resembling lamellar Ichthyosis clinically.

Thus it is our view that skin biopsy is mandatory to differentiate these two conditions.

## REFERENCES

1. Griffiths WAD, Leigh MI, Marks R. Disorders of Keratinization. In: Champion RH, Burton JL, Ebling FJG.(Eds.). Text book of Dermatology 5th Edn., Vol. 2. Oxford: Blackwell Scientific Publications, 1992; 1332-1340.
2. Montgomery H (ed). Congenital Dyslasias. In: Dermatopathology. Vol. 1, New York Harper & Row; 56.
3. Atherton DJ. The Neonate. In: Champion RH, Burton JL, Ebling FJG.(Eds.). Text book of dermatology. 5th Edn., Vol. 2. Oxford: Blackwell Scientific Publications, 1992; 393-349.
4. Reed WB, Herwick RP, Harville Detal. Lamellar Ichthyosis of the new born. Arch Dermatol 1972; 105: 394-9.