

## A Study on Neonatal Dermatoses

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**Abstract:** There are few studies on new born dermatosis in our country. The aim of present study is to know the incidence of cutaneous changes in our area. Influence of Sex, birth weight and duration of gestation on early neonatal skin.

In our study we observe physiological changes were more common than pathological conditions. Preterm and post-term infants are more vulnerable to pathological changes than full term infants.

**Keywords:** Neonatal dermatosis, physiological and pathological conditions.

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### I. Introduction

The term neonate or new born includes all babies from birth to 4 weeks of life. Early neonates are babies from birth to first week of life. Late neonates are babies from 2nd week to 4th week of life. The neonatal skin differs from adult skin in that it is thin, weak intercellular attachments, with less sebaceous or sweat secretion. Skin of neonate shows both physiological and pathological changes.

#### Physiological Conditions

Epstein Pearls, Mongolian Spots, Milia, Lanugohair, Superficial cutaneous desquamation, lineanigra etc.

#### Transient non infective conditions:

Miliria, erythemanonatorum, Acne neonatorum, caput succedaneum etc. Naevi and other developmental defects include melanocytic naevus, salmon patch, Port wine stain, Capillary haemangioma, Cavernous haemangioma. Some serious disorders which require intensive care are harlequin Itchthyosis, bullous and nonbullous ichthyosisiform erythroderma, epidermolysis bullosa etc.

### II. Material And Methods

Hundred Randomly selected new born babies delivered at the government maternity hospital, Tirupati are subjects of present study. Infants were examined after recovery from the stress of labor and delivery. Followed up for a minimum of 3 days to maximum of 30 days depending on the condition. Simple noninvasive procedures like KOH mounting, gram staining, culture and sensitivity and Tzacksmeas were performed.

Cafe - au - lait macule



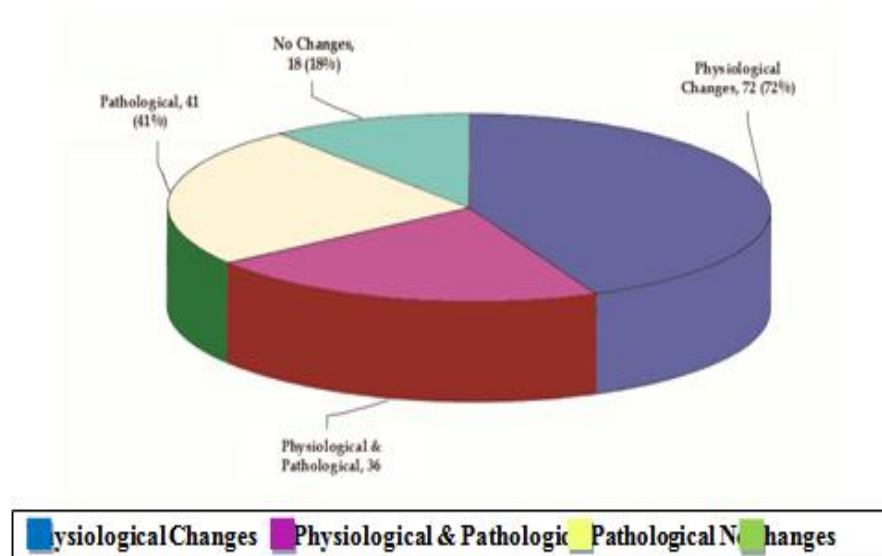
Staphylococcal scalded skin





### III. Results And Observations

#### Incidence of Skin Changes in the Newborn



#### Physiological changes in new born

	Disorder	Cases	Percentage
1.	Superficial desquamation	70	70%
2.	Mongolian spot	65	65%
3.	Miliria	25	25%
4.	Lanugo Hair	18	18%
5.	Occipital Alopecia	10	10%
6.	Peripheral cyanosis	7	7%

#### Transient - Dermatitis

Disorders	Cases	Percentage
Erythema Toxicum neonatorum	25	25%
Milia	15	15%
Caput succedaneum	4	4%
Infection	8	8%

### IV. Discussion

#### Physiological Changes

Physiological changes are seen in 72% of cases.

Superficial desquamation is the commonest change and is observed in 70% of cases. Incidence closely resembles those seen in studies by Nobby et al and Baruah et al. It doesn't seem to have any relationship with gestational age, sex or birth weight.

Milia were observed in 25% cases on face, neck and trunk. The incidence is comparable to the incidence observed by Meenakshiet al. Lanugo hair were observed in 18 cases, more common in premature neonates. Incidence is comparable to Meenakshiet al and Nobby et al. Other physiological conditions observed are peripheral cyanosis, occipital alopecia, Epstein pearls, Sebaceous hyperplasia et al and icterus and lineanigra.

**Table 3 Other conditions in new born**

Disorders	Cases	Percentage
<b>Dermatitis</b>		
Diaper rash	5	5%
Seborrhoeic dermatitis	1	1%
<b>Inherited disorders</b>		
Epidermolysis simplex	1	1%
Nonbullous Icthyosiform erythroderma	1	1%
<b>Naevi and others developmental defects</b>		
Congenital Melanocytic Naevi	17	17%
Epidermal Naevi	1	1%
Haemangiomas	6	6%
cleft palate, tuft hair ect.	2	2%

**Pathological changes in new born**

Of all pathological changes erythema toxicum neonatorum is the commonest condition seen in 25 cases. Its incidence is comparable to most other Indian studies. Incidence of milia is comparable to that observed by Nobby et al (6 %) In the present study overall incidence of infection was 8% Premature babies were more prone for pyogenic infections.

**V. Conclusion**

Physiological dermatosis were most common pathological conditions seen in 41% of new born Preterm infants are more prone to peripheral cyanosis, lanugo hair, milia and oral candidiasis but erythema toxicum neonatorum is less common. Post term neonates have an overall increased incidence of pathological changes when compared to full term neonates.

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