

Original research article

STUDY OF CUTANEOUS LESIONS DURING EARLY NEONATAL PERIOD IN A TEACHING HOSPITAL AND ITS SOCIO-CLINICAL IMPLICATIONS

¹Dr. Nithin S Shagale, ²Dr K. Muralidhar Reddy, ³K. Abhinaya

¹Assistant Professor, Department of Pediatrics, Subbaiah Institute of Medical Sciences, Shimoga, Karnataka, India

²Associate Professor, Department of Paediatrics, Narayana Medical College, Nellore, Andhra Pradesh, India

³Third-Year MBBS, Guntur Medical College, Guntur, Andhra Pradesh, India

Corresponding Author:

Dr. K. Muralidhar Reddy

Abstract

Background: The initial month of extra-uterine life is significant and commonly referred to as the neonatal period as physiological alterations occur as a result of the transition from uterine liquid environments to external parched environments, and dermatological conditions can affect newborns during this time. In comparison to adults, babies' skin is attenuated, has fragile intercellular bonds, and produces less perspiration and sebaceous gland secretion, making them more susceptible to numerous skin infections.

Objectives:

1. To assess the overall incidence of cutaneous lesions in the early newborn period.
2. To know the relationship of these lesions to gestational age, consanguinity, and birth weight.
3. To identify common traditional newborn skin care practices.

Material & Methods:

Study Design: Hospital-based prospective cross-sectional study.

Study Area: The study was conducted in the Department of Paediatrics.

Study Period: 1 year.

Study Population: The study subjects comprised all consecutive intrauterine-delivered newborns during their first 5 days of life.

Sample Size: The study consisted a total of 730 subjects.

Study Tools and Data Collection Procedure: In the present study, newborns were examined for evidence of Cutaneous lesions from birth till their stay in the hospital which was about 5 days, and these Cutaneous lesions were categorized into Mongolian spots, Scaling, Milia, Erythema toxicum, Epstein pearl, Café au lait spots, Sebaceous hyperplasia, Miliaria crystalina, Cutis Marmorata, Sacral dimple, Sacral hypertrichiosis, Salmon patch, Transient pustular melanosis, Accessory nipple, Oral thrush, Colloidion babies, Perianal dermatitis, Sucking blister, Cutaneous candidiasis, Acne neonatorum.

Results: Out of the 1000 Newborns, 105 babies were born to mothers in the age group of 15-19yrs, 571 in the age group of 20-24yrs, 267 to mothers in the age group of 25-29yrs, 52, and 5 babies were born to mothers in the age group of 30-34yrs and ≥ 35 yrs respectively, of these 730 had cutaneous lesions. The maximum number of babies 417 (57.12%) with cutaneous lesions were born to mothers in the age group of 20-24 years.

Conclusion: As it is well known that children are not just “small adults”, newborn babies have more delicate skin than adults and are more prone for a variety of dermatoses. Skin rashes in newborns make the parents anxious. Hence an early diagnosis becomes essential before a treatment, either medical or a traditional practice, is instituted in a situation where the majority of lesions are benign and self-resolving.

Keywords: Neonate, newborn, cutaneous lesions, Mongolian spots, skincare

Introduction

The initial month of extra-uterine life is significant and commonly referred to as the neonatal period as physiological alterations occur as a result of the transition from uterine liquid environments to external parched environments, and dermatological conditions can affect newborns during this time. In comparison to adults, babies' skin is attenuated, has fragile intercellular bonds, and produces less perspiration and sebaceous gland secretion, making them more susceptible to numerous skin infections ^[1].

Because of glandular and melanocytic immaturity in neonatal skin, the cutaneous character differs from that of adults, as its fine layer thickness and biochemical structure cause pH to be alkaline. Anatomical and physiological factors increase the risk of newborn dermatoses (ND). The majority of neonatal cutaneous disorders are natural, short, and self-limiting ^[1, 2]. Skin manifestations in infants can be classified as physiological conditions, birthmarks, transitory eruptions, cutaneous infections, and hereditary conditions. A limited number of these illnesses may have predictive inferences, such as congenital melanocytic nevus ^[3, 4].

During this time, dermatological findings are common and can range from physiological and self-limited lesions induced by the integumentary system's developing process to serious pathological concerns that necessitate therapies and collaboration among specialists ^[5]. As a result, early detection is critical for distinguishing benign lesions from more serious illnesses and providing appropriate counselling to parents. Several fetal, maternal, and environmental variables, including as prematurity, congenital infections, ethnicity, and maternal drug use, might influence the occurrence, type, and progression of cutaneous lesions ^[5-8].

Keeping this in mind, the study sought to determine the prevalence of dermatological lesions in the early neonatal period in neonates delivered, as well as the socio-clinical consequences for the study population.

Objectives

1. To assess the overall incidence of cutaneous lesions in the early new born period.
2. To know the relationship of these lesions to gestational age, consanguinity and birth weight.
3. To identify common traditional newborn skin care practices.

Material & Methods

Study Design: Hospital based prospective cross-sectional study.

Study Area: The study was conducted in the Department of Paediatrics.

Study Period: 1 year.

Study Population: The study subjects comprised of all consecutive intrauterine-delivered newborns during their first 5 days of life.

Sample Size: The study consisted of a total of 730 subjects.

Sampling Technique: Simple Random technique.

Inclusion Criteria: All consecutive intrauterine-delivered newborns during their first 5 postnatal days.

Exclusion Criteria

- All Iatrogenic Cutaneous changes.

Classification

- The age of the mother was calculated as to the nearest completed year. The age groups of mothers were categorized in an interval of 05 years.
- The newborns were classified according to maturity into Preterm (≤ 37 weeks completed weeks), Term (38-41 weeks) and post-term (≥ 42 weeks).
- The birth weights were classified into two groups i.e., less than 2.5 kgs (up to and including 2499g) and greater than or equal to 2.5 kgs.

Ethical Consideration: Institutional Ethical committee permission was taken prior to the commencement of the study.

Study Tools and Data Collection Procedure

In the present study, newborns were examined for the evidence of Cutaneous lesions from birth till their stay in the hospital which was about 5 days, and these Cutaneous lesions were categorized into Mongolian spots, Scaling, Milia, Erythema toxicum, Epstein pearl, Café au lait spots, Sebaceous hyperplasia, Miliaria crystalina, Cutis Marmorata, Sacral dimple, Sacral hypertrichiosis, Salmon patch, Transient pustular melanosis, Accessory nipple, Oral thrush, Colloidion babies, Perianal dermatitis, Sucking blister, Cutaneous candidiasis, Acne neonatorum.

Informed written consent was obtained from the parents or legally authorized persons. Information regarding the bio-data of the newborn like sex, birth weight, gestational age, common traditional skin care practices for newborn and in specific to the lesion, if any was gathered by interviewing the parents, guardian, or caregivers either in labor room or in the wards of the hospital. The hospital records and case sheets were also referred for additional information. Information regarding the maternal age, parity and consanguinity were noted. The mode in which delivery took place was also recorded. History of maternal illnesses like fever, respiratory tract infection, viral infections, Diabetes Mellitus, Hypertension, etc., during the period of pregnancy was noted. All newborns were subjected to clinical and dermatological examination by a Pediatrician daily for the first five days. The entire skin surface, including the mucous membranes and the nails, was thoroughly examined. Cutaneous lesions so found on examination were confirmed as to diagnosis and, if need be, managed by a Dermatologist.

No specific investigations or interventions were conducted on the newborns and only the photographs were taken.

Statistical Analysis

SPSS version 24 was used for all statistical analysis. Descriptive statistics like mean, standard deviation and proportions were calculated for all values. Chi square test was used to study the association between burden and socio-demographic variables. Appropriate statistical tests were used accordingly, P value ≤ 0.05 considered a significant difference or relation, and the statistics (Frequencies (F), Percentages (%), Means (x), Standard Deviations (SD), and Mean of Score.

Observations & Results

The study involved 1000 cases that were delivered. Out of the 1000 newborns examined, 730 (73%) had one or more cutaneous lesions.

Table 1: Distribution of Cutaneous lesions according to type

Cutaneous lesion	Total	
	Number	Percentage
Mongolian spots	214	29.32
Scaling	90	12.33
Milia	56	7.67
Erythema toxicum	53	7.26
Café au lait spots	50	6.85
Epstein pearl	40	5.48
Milariacrystalina	27	3.70
Sebaceous hyperplasia	25	3.42
Cutis Marmorata	19	2.60
Sacral dimple	14	1.91
Sacral hypertrichiosis	10	1.37
Salmon patch	07	0.96
Transient pustular melanosis	07	0.96
Accessory nipple	04	0.55
Oral thrush	03	0.41
Colloidion babies	02	0.27
Perianal dermatitis	02	0.27
Sucking blister	01	0.14
Cutaneous candidiasis	01	0.14
Acne neonatorum	01	0.14
Multiple lesions	104	14.25
Total	730	100

In the present study, out of 730 (100%) Cutaneous lesion cases, single lesions namely Mongolian spots constituted the maximum of 214 (29.32%), followed by Scaling 90 (12.33%), Milia 56 (07.67%), Erythema toxicum 53 (07.26%), Café au lait spots 50

(06.85%) and Epstein pearl 40 (05.48%) cases. The least number was seen in Sucking blister, Acne neonatorum and cutaneous candidiasis with 01(0.14%) case each. Multiple lesions were seen in 104 (14.25%) newborns which comprised of 212 cutaneous lesions in total.

Out of the 1000 Newborns, 538 were males and 462 were females. The male-to-female ratio was 1.16:1, of these 730 had cutaneous lesions. Among them 392 (72.8%) of 538 males and 338 (73.2%) of 462 females had cutaneous lesions.

Table 2: Distribution of Cutaneous lesions according to Birth weight

Cutaneous lesion	<2.5 kg		≥2.5 kg	
	Total	%	Total	%
Mongolian spots	62	29.95	152	29.06
Scaling	23	11.11	67	12.81
Milia	15	7.25	41	7.84
Erythema toxicum	15	7.25	38	7.27
Café au lait spots	11	5.31	39	7.46
Epstein pearl	11	5.31	29	5.54
Milariacrystalina	03	1.45	24	4.59
Sebaceous hyperplasia	06	2.90	19	3.63
Cutis Marmorata	11	5.31	08	1.53
Sacral dimple	05	2.42	09	1.72
Sacral hypertrichiosis	08	3.87	02	0.38
Salmon patch	00	0.00	07	1.34
Transientpustular melanosis	03	1.45	04	0.77
Accessory nipple	00	0.00	04	0.77
Oral thrush	01	0.48	02	0.38
Colloidion babies	00	0.00	02	0.38
Perianal dermatitis	01	0.48	01	0.19
Sucking blister	00	0.00	01	0.19
Cutaneous candidiasis	00	0.00	01	0.19
Acne neonatorum	00	0.00	01	0.19
Multiple lesions	32	15.46	72	13.77
Total	207	100	523	100

Out of 1000 newborns, 723 weighed more than or equal to 2.5kgs and 277 weighed less than 2.5kgs, of these 730 had cutaneous lesions. Among them, 523 (72.3%) of 723 babies weighing more than or equal to 2.5kgs had cutaneous lesions as compared to 207(74.7%) of 277 low birth weight babies.

Table 3: Distribution of Cutaneous lesion according to Gestational Age

Cutaneous lesion	Preterm (≤37wks)		Term (38-41wks)		Postterm (≥ 42wks)	
	Total	%	Total	%	Total	%
Mongolian spots	31	31.96	182	29.74	01	4.76
Scaling	06	6.19	80	12.42	08	38.10
Milia	06	6.19	49	8.01	01	4.76
Erythema toxicum	08	8.25	41	6.70	04	19.06
Café au lait spots	07	7.22	42	6.86	01	4.76
Epstein pearl	03	3.09	37	6.05	00	0.00
Milariacrystalina	03	3.09	22	3.59	02	9.52
Sebaceous hyperplasia	04	4.12	20	3.27	01	4.76
Cutis Marmorata	11	11.34	08	1.31	00	0.00
Sacral dimple	04	4.12	10	1.64	00	0.00
Sacral hypertrichiosis	00	0.00	09	1.47	01	4.76
Salmonpatch	00	0.00	07	1.14	00	0.00
Transientpustular melanosis	01	1.03	05	0.82	01	4.76
Accessory nipple	00	0.00	04	0.65	00	0.00
Oral thrush	01	1.03	02	0.33	00	0.00
Colloidion babies	00	0.00	01	0.16	01	4.76
Perianal dermatitis	00	0.00	02	0.33	00	0.00
Sucking blister	00	0.00	01	0.16	00	0.00
Cutaneous candidiasis	00	0.00	01	0.16	00	0.00
Acne neonatorum	00	0.00	01	0.16	00	0.00
Multiple lesions	12	12.37	92	15.03	00	0.00
Total	97	100	612	100	21	100

Out of the 1000 newborns, 782 were term, 147 were preterm and 71 post term babies, of these 730 had cutaneous lesions. Among them, 97 (66%) of 147 preterm, 612 (78.3%) of 782 term and 21(29.6%) of 71 post-term babies had cutaneous lesions.

Out of 1000 Newborns, 580 were born to primigravida, 328 to 2nd gravida, 73 to 3rd gravida, 15 to 4th gravida and 04 to 5th gravida mothers, of these 730 had cutaneous lesions. Among them, 423 (72.9%) of 580 born to primigravida, 240 (73.1%) of 328 born to 2nd gravida, 53 (72.6%) of 73 born to 3rd gravida, 11 (73.3%) of 15 born to 4th gravida and 3 (75%) of 04 babies born to 5th gravida mothers had cutaneous lesions.

Out of 1000 Newborns, 753 babies were born of non-consanguineous marriage and 247 were born of consanguineous marriage. Among them, 551 (73.2%) of 753 babies born of non-consanguineous marriage and 179 (72.5%) of 247 born of consanguineous marriage had cutaneous lesions.

Table 4: Distribution of Cutaneous lesion according to route of delivery

Cutaneous lesion	Vaginal		Caesarian	
	Total	%	Total	%
Mongolian spots	155	31.19	59	25.32
Scaling	63	12.68	27	11.59
Milia	41	8.25	15	6.43
Erythema toxicum	28	5.63	25	10.73
Café au lait spots	34	6.84	16	6.87
Epstein pearl	25	5.03	15	6.43
Milariacrystalina	24	4.83	03	1.29
Sebaceous hyperplasia	16	3.22	09	3.86
Cutis Marmorata	11	2.21	08	3.43
Sacral dimple	08	1.61	06	2.58
Sacral hypertrichiosis	07	1.42	03	1.29
Salmonpatch	07	1.42	00	0.00
Transientpustular melanosis	04	0.80	03	1.29
Accessory nipple	02	0.40	02	0.86
Oral thrush	03	0.60	00	0.00
Colloidion babies	02	0.40	00	0.00
Perianal dermatitis	02	0.40	00	0.00
Sucking blister	01	0.20	00	0.00
Cutaneous candidiasis	01	0.20	00	0.00
Acne neonatorum	01	0.20	00	0.00
Multiple lesions	62	12.47	42	18.03
Total	497	100	233	100

Out of 1000 Newborn, 677 were delivered through vaginal delivery and 323 through caesarian section, of these 730 had cutaneous lesions. Among them, 497 (73.4%) of 677 delivered through the vaginal route and 233(72.1%) of 323 were born through caesarian section had cutaneous lesions.

Table 5: Distribution of Cutaneous lesions according to Socioeconomic status

Socio-economic Status	Total	
	Number	Percentage
Class I	20	02.74
Class II	126	17.26
Class III	382	52.33
Class IV	160	21.92
Class V	42	05.75
Total	730	100

Out of the 1000 Newborns, 28 belonged to Class I, 173 belonged to Class II, 522 babies to Class III, 220 to Class IV and 57 belonged to Class V of Modified B.G. Prasad’s

socioeconomic classification, of these 730 had cutaneous lesions. The maximum number of babies with cutaneous lesions 382 (52.33%) were seen in the class III group.

Table 6: Distribution of Cutaneous lesions in relation to the age of the mother

Age of mother (in years)	(Cutaneous lesions) Total	
	Number	Percentage
15-19	76	10.41
20-24	417	57.12
25-29	195	26.71
30-34	38	05.21
≥35	04	00.55
Total	730	100

Out of the 1000 Newborns, 105 babies were born to mothers in the age group of 15-19yrs, 571 in the age group of 20-24yrs, 267 to mothers in the age group of 25-29yrs,52, and 5 babies were born to mothers in the age group of 30-34yrs and ≥35yrs respectively, of these 730 had cutaneous lesions. The maximum number of babies 417 (57.12%) with cutaneous lesions were born to mothers in the age group of 20-24 years.

Table 7: Distribution of Cutaneous lesions with relation to maternal illness

Illness	(Cutaneouslesion) Total	
	Number	Percentage
Maternal illness	87	11.92
Nomaternalillness	643	88.08
Total	730	100

Out of 1000 Newborns, 117 were born with a history of maternal illness while 883 were born with no maternal history of illness, of these 730 had cutaneous lesions.

Table 8: Distribution of local practices in relation to cutaneous lesions

Local practices	Total	
	Number	Percentage
Castor oil	122	16.71
Baby products (soap/oil/powder)	112	15.34
Gram flour	34	04.67
Turmeric	24	03.28
No practices	438	60.00
Total	730	100

Mothers who did not have any preferential thoughts about the use of traditional skin care methods for the lesions of their babies were 438(60.00%) in number. Among the remaining 292 mothers, 122(16.71%) mothers preferred using castor oil for the baby’s

skin, 112 (15.34%) wanted to use commercial baby products. Gram flour and turmeric was the preferred treatment of 34(04.67%) and 24 (03.28%) mothers respectively.

Photographs



Photo 1: Mongolian spots seen over but tock and thigh



Photo 2: Epstein pearls seen over the palate



Photo 3: Milia seen over the nose



Photo 4: Accessory nipple seen over the chest



Photo 5: Physiological Scaling seen over the abdomen

Discussion

A variety of skin conditions were seen among newborns during the early neonatal period. In this study, Mongolian spots were the commonest lesion seen and constituted the maximum of 318 (43.56%) cases which included babies with both single and multiple cutaneous lesions. Similarly, a higher frequency of these have been reported in the studies conducted by Shih IH *et al.* ^[9], Patil S *et al.* ^[10], Dash K *et al.* ^[11], Kulkarni ML and Singh R ^[12], Nobby B and Chakrabrty N ^[13] and Prusachatkunakon *et al.* ^[14] who also noted the same in their studies conducted in many parts across the world. Studies demonstrated that Mongolian spots are significantly more common among Asian and black neonates. The difference may be due to racial variation and a greater degree of natural pigmentation and persistence of melanocytes in the affected area.

Sex predilection in relation to cutaneous lesions in our study revealed that females outnumbered males with 338 out of total 462 females (73.2%) as compared to 392 out of total 538 males (72.8%) had cutaneous lesions, although the difference was not statistically significant. Observations from the study conducted by Sachdeva *et al.* ^[15], Kulkarni ML and Singh R ^[12], Nobby B and Chakrabrty N ^[13] revealed that males outnumbered females in relation to the incidence of cutaneous lesions.

Mongolian spots, scaling, erythema toxicum neonatorum and sebaceous hyperplasia were common amongst males in our study as well as those reported by Shajari *et al.* ^[16], Sachdeva *et al.* ^[15], Tayeh RI *et al.* ^[17] and Ahsan U *et al.* ^[18] Epstein pearls and café au lait spots were more frequent in females in our study as well as in a study conducted by Al-Dahiyat KA ^[19]. However the studies conducted by Shajari *et al.* ^[16] Sachdeva *et al.* ^[15] and Ahsan U *et al.* ^[18] revealed higher frequency of Epstein pearls amongst males as compared to female babies. There was no significant sex difference pertaining to the incidence of other cutaneous lesions.

Analysis pertaining to the birth weight revealed 523 of 723 babies (72.3%) weighing more than or equal to 2.5kgs had cutaneous lesion as compared to 207 of 277(74.7%) LBW babies in the present study. The maximum number of cutaneous lesions were seen in babies weighing more than or equal to 2.5kgs. This is consistent with the studies conducted by Al-Dahiyat KA ^[19], Sachdeva *et al.* ^[15] and Tayeh RI *et al.* ^[17] Numerically all the cutaneous lesions were present in large figures in newborns weighing more than or equal to 2.5kgs except for Sacral Hypertrichiosis 8 (3.87%) and Cutis marmorata 11 (5.31%) which were oftener seen in newborns weighing less than 2.5kgs.

In relation to the gestational maturity results revealed that 97 of 147 preterm (66%), 612 of 782 term (78.3%) and 21 of 71 babies born post term (29.6%) had cutaneous lesions. The babies born at term in our study were found to have maximum cutaneous lesions, 612 cases. The preterm and term babies had more cutaneous lesions compared to post term babies, results being statistically significant ($p < 0.0001$). Our observations are in concurrence with the studies conducted by Gokdemir *et al.* ^[20] Al-Dahiyat ^[19], Sachdeva *et al.* ^[15] Patil S ^[10], Dash K *et al.* ^[11] Kulkarni ML and Singh R ^[12] and Tayeh RI *et al.* ^[17] Mongolian spots were the most common cutaneous lesion seen among them.

The pathophysiology of this increase in post term infants is not known. Erythema toxicum neonatorum was predominantly seen in term infants and rarely seen in preterm infants in our study which concurred with the results of the study conducted by Al-Dahiyat KA ^[19] and Sachdeva *et al.* ^[15] The aetiology of Erythema toxicum neonatorum remains unknown, intestinal toxins, allergic reactions, mechanical or chemical irritation, hormonal influences on the extracellular matrix and a transient graft versus-host reaction due to maternal lymphocyte is suggested to be a possible cause. Cutis marmorata was seen predominantly in preterm neonates. 11(11.34%) of the 97 preterm babies were observed to have cutis marmorata. The actual figure may have been higher as this is an exaggerated vasomotor cutaneous response of a transient nature and is likely to be normal.

The present study revealed that out of 730 cases with cutaneous lesions, 423 newborns were born to primigravida, 307 were born to multigravida. The reverse observation was made by Sachdeva *et al.* ^[15] which showed that 315(63%) mothers were multigravida and 185(37%) mothers were primigravida. The result of our study does not concur with above mentioned study. This may be a difference of demography of the population and may not reflect upon the occurrence of skin lesion. Out of the 1000 newborns delivered in the study period, 551 of 753(73.2%) babies born of consanguineous marriage and 179 of 247(72.5%) babies born of non- consanguineous marriage had cutaneous lesions, the difference being not statistically significant. Consanguinity does not seem

to play any role in the occurrence of skin lesions. Study conducted by Kulkarni ML and Singh R¹² where anatomic variants in relation to consanguinity revealed that 28.2% of babies were born to consanguineous couples and 67.6% of babies were born to non-consanguineous couples, the difference being highly significant^[12].

In relation to the route of delivery the present study revealed that 677 (67.7%) were delivered through vaginal delivery and 323 (32.3%) through caesarian section. Similarly study conducted by Ahsan U *et al.*^[18] revealed that out of the 1000 babies, 779(77.9%) were delivered vaginally and 221(22.1%) were born by cesarean section. Another study conducted by Sachdeva *et al.*^[15] revealed that out of the 500 newborns studied equal number of neonates that is 250(50%) each were delivered by normal vaginal delivery and caesarian section. In any case the mode of delivery probably does not have any bearing on the incidence of cutaneous lesions.

In terms of Socioeconomic stratification majority that is, 382 (52.33%) newborns belonging to Class III and 160(21.92%) to Class IV of socioeconomic group had Cutaneous lesions. Similarly, study conducted by Kulkarni ML and Singh R^[12] revealed that majority of the newborns with cutaneous lesions belonged to the lower socioeconomic strata. The present study being conducted at a rural teaching hospital, the study group involved predominantly lower socioeconomic groups. However, no data is available to support the influence of socioeconomic status on the development of cutaneous lesions in newborn especially among the rural population.

With regard to maternal age, the maximum cutaneous lesions 417 (57.12%) were seen in newborns of mothers in the age group of 20-24 years followed by 195 (26.71%) in the age group of 25-29 years and 76(10.41%) mothers were in the age group of 15-19 years in our study. The minimum 04 (0.55%) were seen in more than or equal to 35 years. Observations of the study conducted by Sachdeva *et al.*^[15] were consistent with our results where a maximum number that is 262(52.4%) mothers were in the age group of 21-25 years, 129(25.8%) mothers in the age group less than 20years and remaining 109(21.8%) mothers were in the age group of 26-40 years.

With reflection to maternal illness in the present study out of 730 cases, 87 (11.92%) newborns born with maternal history of illness and 643 (88.08%) born with no history of maternal illness had Cutaneous lesions. Study conducted by Sachdeva *et al.*^[15] revealed that 231(46.2%) mothers had associated illness during pregnancy. Unlike our study, illness in the mother during pregnancy did not appear to influence the development of cutaneous lesions in newborn in a study conducted by Shajari *et al.*^[16].

The results pertaining to the local practices of skin care revealed that of the 1000 newborns examined, a vast majority of mothers whose babies had no cutaneous lesions preferred to use commercial baby products for skin care of their newborns. Out of the 730 mothers whose babies had cutaneous lesions, 438(60.00%) mothers did not have any preferential thoughts about use of traditional skin care methods for the lesions of their babies, indicating the increasing awareness among people regarding newborn care. Among the remaining 292 mothers, 122(16.71%) mothers preferred using castor oil for the baby's skin, 112 (15.34%) wanted to use commercial baby products. Gram flour and turmeric was the preferred treatment of 34(04.67%) and 24 (03.28%) mothers respectively. It appears that traditional practices and time-honored rituals like use of castor oil, gram flour and turmeric are still prevalent in the community. These child rearing practices are of uncertain or of doubtful utility, and may be harmless or

innocuous. However, study conducted at L.T.M.G. Hospital and L.T.M.M. College, Sion, Mumbai, India^[21] to determine transcutaneous absorption of a mixture of coconut and meadowfoam oil revealed significant absorption in preterm neonates. Unless the hazards of traditional skin care practices are widely recognized, it is best to ignore them because a concerted drive against these practices may actually be counterproductive.

Conclusion

As it is well known that children are not just “small adults”, newborn babies have more delicate skin than adults and more prone for a variety of dermatoses. Skin rashes in newborns make the parents anxious. Hence an early diagnosis becomes essential before a treatment, either medical or a traditional practice, is instituted in a situation where majority of lesions are benign and self-resolving. Knowledge of the neonatal dermatoses and the local practices for the same among the care givers becomes essential. Only atypical presentations, persistent lesions and those occurring in neonates with signs of systemic illness should be evaluated.

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