

THE EFFECT OF BALATAILA ABHYANGA ON SERUM TRIGLYCERIDE LEVEL OF FULL TERM NEONATE

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ABSTRACT

Introduction: The science of *Ayurveda* includes all that is essential to make a man not only healthy, but also happy. *Ayurveda* has described many *paricharya* in detail like *Garbhini Paricharya*, *Jatamatra Paricharya*, *Navjat balak paricharya* etc. In *Jatamatra paricharya* *Sushrutacharya* has advised *balatail Abhyanga* for neonate immediate after birth. In the neonate during the process of labor *vataprakopa* occurs and baby has to undergo lot of excursion so *Abhyanga* is necessary. It reduces stress, induces sleep, so it helps to maintain good health in neonatal age. **Materials and methods:** The therapeutic protocol in the present study includes 20 neonates in single group. Study done by using randomized open trial method. In the study both male and female neonates with irrespective of religion, are taken and treated with trial drug *bala taila*. For trial, *Abhyanga* was done with *bala tail*; First *Abhyanga* was done within one to two hours of delivery, then it was done once a day, early in the morning for 30 days and serum triglyceride level was recorded before and after *abhyanga* for every 15 days. **Results:** As a statistical analysis *balataila abhyanga* is found significant increase in serum triglyceride level. Data is presented in paper. **Assessment:** Moderate improvement is seen in serum triglyceride level of neonates. **Discussion and conclusion:** Study shows *bala taila abhyanga* is significant in serum triglyceride level in neonates.

Key words: - *Bala taila*, *Abhyanga*, neonate, Serum triglyceride etc.

INTRODUCTION

Ayurveda is complete life science for *swasthya* means health well-being is expected in *Ayurveda*. For that purpose *Ayurveda* has advised some rules & regimens according to age, *Rutu*, *Dina* etc. along with some treatment part. These rules and regimens called as *Paricharya*. *Ayurveda* has described many *paricharya* in detail like *Garbhini Paricharya*, *Jata-*

matra Paricharya, *Navjat balak paricharya* etc. In *Jatamatra paricharya* *Sushrutacharya* has advised *balatail Abhyanga* for neonate immediate after birth¹. *Abhyanga* reduces the stress, improves *netraprasadhan*, *vatavikara* suppressed, induces good sleep and gives overall nourishment (*Pushti*) to baby and skin. In the neonate during the process of labor *vataprakopa* occurs and baby has to un-

dergo lot of excursion so *Abhyanga* is necessary. It reduces stress, effects of *prakopit vata*, induces sleep, so it helps to maintain good health in neonatal ageⁱⁱ. It is important to maintain the neonatal health so, that forthcoming life of baby will be healthy. During labor baby has to undergo sever stress, it had to accumulate itself with passage and to come outside, because of these *shramas*, baby becomes tired. Here *Abhyanga* helps it to release stress and reduced the *shramaparinam*.ⁱⁱⁱ Due to all these stress and *shrama* here many certain disorders arise, these are particularly due to *prakupit vata*. So, *Abhyanga* helps to maintain the function of *vata* properly and reduces *vatavikar*.^{iv}

• **AIMS & OBJECTIVE: -**

- To study effects of *balatail Abhyanga* on serum triglyceride level of neonate.
- To find out a safe, simple, effective and economical method for becoming a healthy individual
- To rule out possible adverse effect of *balataila abhyanga* on neonate

• **MATERIALS AND METHODS:** The therapeutic protocol in the present study includes 20 neonates in a single group; selected from neonates delivered at Bharati Ayurved Hospital, Pune, with irrespective of their sex, religion etc., using randomized open trial.

▪ **Inclusion criteria :-**

- ✓ Full term baby delivered normally or by caesarean section.
- ✓ First, second, third or any no of child which is from consanguineous or non-consanguineous marriage couples.
- ✓ Haemodynamically stable.
- ✓ Only exclusively Breast feed baby.

▪ **Posology:**

- ✓ Babies who have full family support.

▪ **Exclusion criteria:-**

- ✓ Pre term babies (before 36 weeks of Gestational age)
- ✓ Baby with birth asphyxia.
- ✓ Baby having congenital anomaly
- ✓ Intrauterine growth retarded babies.
- ✓ Mother having D.M. or any infective disease like kochs etc.

• **STUDY DESIGN: -**

Total 20 cases were taken for study which were selected randomly. Detailed case study of patient done. Complete general examination of mother done. For *Abhyanga* and to enroll in the study consent was taken from the mother or father on same day of delivery. Along With *abhyanga*, Routine care with breast feed, kept warm and dry, daily bath given with warm water were done and investigation like haemogram, blood group, serum triglyceride level etc has been done. For trial, *Abhyanga* was done with *bala tail*. First *Abhyanga* was done within one to two hours of delivery and then it was done once a day, early in the morning for 30 days. First 10 days *Abhyanga* was done by *vaidya* and then training was given to mother for *Abhyanga*. Application of *Bala Tail* (warm oil) did as follows Started from head → of baby → upper extremities → lower extremities → chest → abdomen → back → buttocks simultaneously. As in above sequence application of *taila* was done in *Anulome gati*.

Baby was kept NBM or not given feed ½ to 1 hour before and after *Abhyanga*. Other oil (except *Bala tail*), soap, powder application is avoided completely for 1 month.

Table 1 Showing posology of trial drug

Group	Drug used for <i>Abhyanga</i>	Time of application	Dose	Duration
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Trial group	<i>Bala tail</i>	within 1-2 hrs of delivery, then once a day, early in the morning	15ml – per day	30 days
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• **FOLLOW UP STUDY:** - During the trial all patients were regularly analysed in O.P.D. or home visit after every 15 days

• **CRITERIA FOR ASSESSMENT:** - For assessment of result of trial drug all patients were observed for weight, head circumference, chest circumference, length, skin and

sr. triglyceride level and result were obtained. Here results regarding sr. triglyceride only presented.

• **STATISTICAL ANALYSIS:** - All observations were noted before and after *abhyanga* and paired “t” test is applied for statistical analysis.

Table 2- Showing statistical analysis of 20 neonates for Sr. Triglyceride level

	1 day		15 day		30 day	
	Pre <i>Abhyanga</i>	Post <i>Abhyanga</i>	Pre <i>Abhyanga</i>	Post <i>Abhyanga</i>	Pre <i>Abhyanga</i>	Post <i>Abhyanga</i>
N	20	20	20	20	20	20
Mean	82.80	94.30	102.95	113.90	99.10	108.40
SD	11.91	10.39	9.71	8.00	12.04	13.16
SEM	2.66	2.32	2.17	1.79	2.69	2.94

From above data $P < 0.0001$, so statistically it is highly significant.

• **OBSERVATIONS AND RESULT**

Table 3—showing result of 20 neonate before and after *abhyanga* on the Sr,Triglyceride level

Sr. Triglyceride						
1st Day		15th Day		30th day		
Pre <i>Abhyanga</i>	Post <i>Abhyanga</i>	Pre <i>Abhyanga</i>	Post <i>Abhyanga</i>	Pre <i>Abhyanga</i>	Post <i>Abhyanga</i>	Post <i>Abhyanga</i>
78	89	91	103	69	72	
70	92	101	111	89	94	
72	79	112	121	103	110	
76	102	114	120	102	112	
89	99	103	121	94	112	
70	76	96	107	98	121	
65	88	91	102	94	102	
103	107	108	110	89	96	
98	104	107	110	103	107	
84	94	107	120	104	114	
103	110	104	124	112	126	
102	112	106	114	115	123	
72	90	94	108	111	117	
78	94	96	110	96	110	
84	91	92	121	97	104	

88	101	111	124	114	118
94	104	128	128	116	124
76	88	110	114	98	103
77	88	90	101	78	90
77	78	98	109	100	113

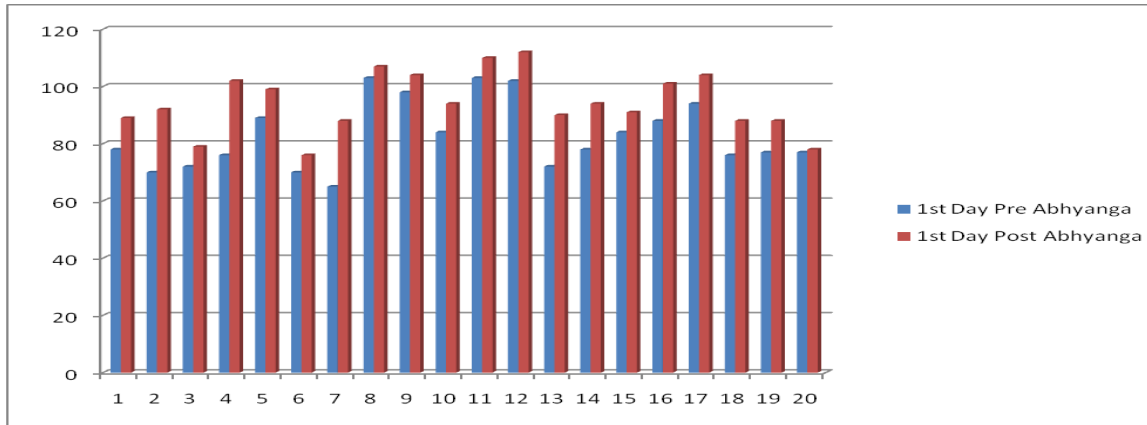


Fig 1 showing results of 20 neonates before and after *abhyanga* of first day on serum triglyceride level

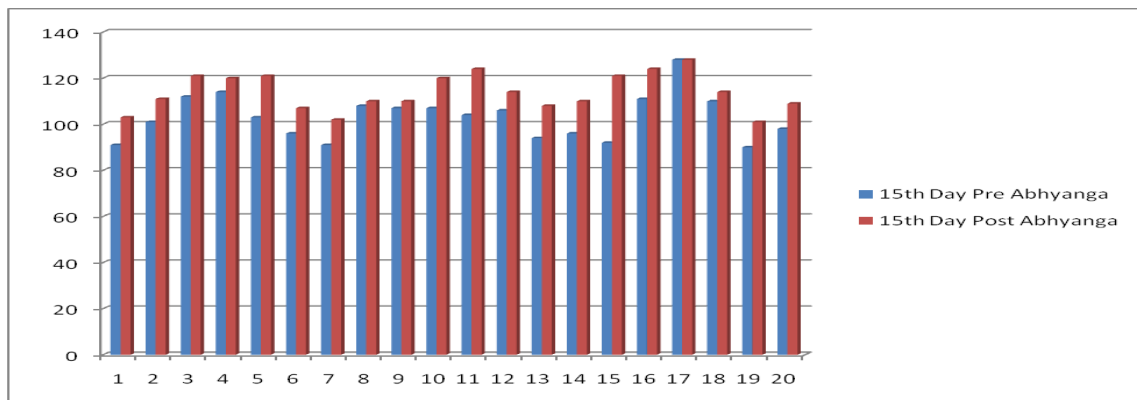


Fig 2 showing results of 20 neonates before and after *abhyanga* of 15 day on serum triglyceride level

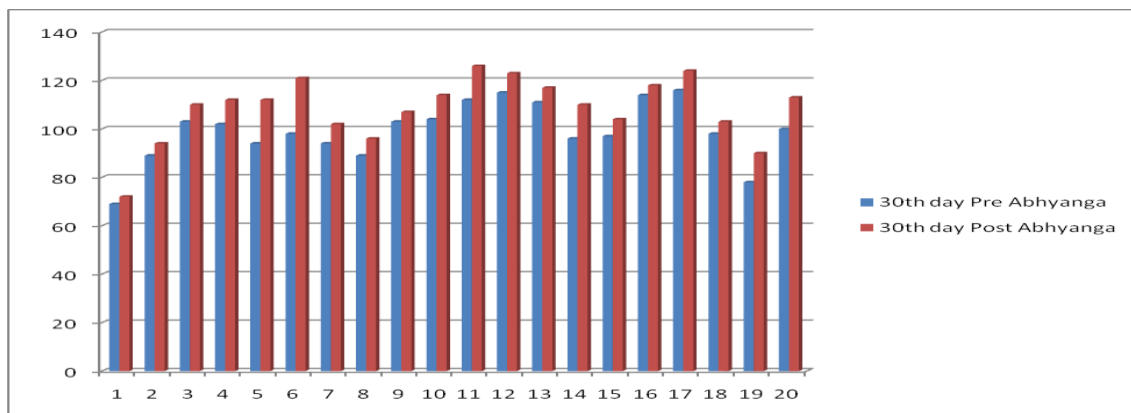


Fig 3 showing results of 20 neonates before and after *abhyanga* of 30 day on serum triglyceride level.

In this study sr. triglyceride level was monitored on 1st day, 15th day and 30th day of life. Sr. triglyceride done before and after *Abhyanga*. From above table and fig it was observed that sr. triglyceride level increased after *Abhyanga* by *bala taila*.

DISCUSSION

Application of oil on skin is the *Abhyanga*; in *ayurveda* different *paricharyas* are mentioned to maintain *swasthya* (health). *Abhyanga* is one of the important *upakrama* in these *paricharyas*. In first 24 hours after birth it reduces stress of *shrama* of neonates, which occurs during the labor and thus suppresses *vataprakopa* and its symptoms. In this study sr. triglyceride level was monitored on 1st day, 15th day and 30th day of life. Sr. triglyceride done before and after *Abhyanga*. It was observed in 20 neonates. In this study not a single baby showed any allergic reaction or skin rash to *balataila Abhyanga*. No skin infection or fungal infection was seen on baby's skin.

CONCLUSION

- i. *Balatail Abhyanga* helps in *sharir pushti*.
- ii. *Balatail Abhyanga* helps to maintain and nourishment of *Mans dhatu* and *meda dhatu* of baby.
- iii. Skin remains *snigdha* and healthy.
- iv. Sr. Triglyceride level significantly increased after *bala taila abhyanga*.
- v. In this study not a single baby showed any allergic reaction or skin rash to *bala taila Abhyanga*.

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ⁱⁱⁱ Kashyapa Samhita of Vriddha Jivaka revised by Vatsya with Sanskrit introduction by Pandit Hemaraja Sharma, Chaukhamba Sanskrit Series, 2002.

^{iv} Ayurvedia Prasutitantra Avam Striroga (vol. i & ii) by prof. Premavati Tiwari, Chaukhamba Orientalia, Varanasi.

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