IJOOAR

INDIAN JOURNAL OF ODYSSEY OF AYURVEDIC RESEARCH

EVALUATION OF BALA TAILABHYANGA IN DEVELOPMENT OF NEWBORN BABY - A CASE STUDY

Vd. Pandey Shilpa Raghunath , (P.G Scholar)

Vd Babel Sadhana , (Guide and HOD)

Vd .Chitte Sanjay , (Professor)

Kaumarbhritya Department

SHREE SAPTASHRUNGI AYURVED MAHAVIDYALAYA, NASHIK

ABSTRACT:

Newborn and infancy period is the most crucial stage of life. One has to nurture the baby in systematic way for their proper growth and development. Abhyangais one of the meticulous procedure mentioned in ancient Ayurvedic texts. Abhyanga is one of the salient protocol mentioned in *jatamatra paricharya* of Ayurveda, allude towards newborn care. *Abhangya* is also incorporated as daily routine practices in *Dinacharya* for the maintenance of health. Application of oil to the skin followed by massage in a specific direction is called as abhyanga. Abhyanga has multitude of beneficial effects, it calms and soothe the baby, improves blood circulations, and musculo skeleton system , GIT functions, weight gain in low birth wt babies. Several oils are mentioned in ancient Ayurvedic texts e.g *Bala tail*, *sesame tail*, *lakshadi tail*, *Ashwagandhadi tail*. There are certain methods for the application of oil included in the texts are *abhyanga*, *samvahana*, *parisheka*, *mardana*. Practicing *abyanga* daily in babies enhances

8

their attentiveness, enhances the immune functions, increase strength in premature babies and improves the skin texture. *Abhyanga* should be done in a specific way with delicate movements of hand, taking adequate precautions. Over stretching of limbs, pulling of ear, squeezing of breast nodule and other painful practices should be avoided. The present article is a case study on the effect of *abhyanga* in a newborn considering its scientific approach for the establishment on role of Ayurveda in modern society.

Keywords: jatamatra paricharya, Abhyanga, Dinacharya

INTRODUCTION :

Ayurveda is a science of life which provides not only the curative but also the preventive principles for healthy and long life . Ayurveda has explained vast variety of preventive therapies and medications as per the various stages of life. *Jatamatra paricharya* is one of the crucial aspect of Ayurveda which specially meant for newborn care. Newborn and infancy period is the first and most crucial stage of life. Ayurveda emphasized a procedure called as *abhyanga* to be practiced as routine in newborns. *Abyanga* means body is oleated with oil with specific pressure and movements (*gati*) and applying the strokes. It can also be understood as application of oil to the skin of the baby followed by massage in specific direction¹. There are different communities practicing different kinds of newborn care. The difference is due to variation in geographical and climatic conditions in various regions of India. *Abyanga* helps for the healthy growth and development of newborns. The oil used for the massages differs from region to region depending on their climatic conditions. In north India mustard oil is mostly preferred for baby massage.

Ayurveda has explained a various medicated oils which is highly useful for babies proper growth and development. *Bala taila, dashmula taila* and various other medicated oil is preferred for *abyanga* in newborns and infants as per Ayurveda. *Bala taila* which is a *siddha tail kalpana*² widely used for newborns, as it is responsible for *dhatuposhan* in baby which gives strength and improves the activity of the baby. Newborn and infancy is first stage of life which is mainly a *kaphaj kala*, so *abhyanga* in this period alleviates the *kapha dosha* and does not allow to aggravate. There are various methods for the application of oil like *samvahana, parisheka ,abhyanga and mardana. Parisheka* means sprinkling of oil and this is useful immediately after birth for relieving the stress of newborn. *Samhavana* is just smearing of oil over bodyparts. *Abyanga* means application of tender strokes. *Mardana* is application of oil or dry churna over the body parts with enough pressure along with squeezing of the muscles in proper manner. *Astang samgraha* has quoted "*Abyangmacharetnity m*^{*3} as daily practice of abyanga therapy.

OBJECTIVE OF THE STUDY :

To study the significance of *Bala tail abhyanga* in development of newborn baby in our hospital.

ASSESSMENT CRITERIA :

- Weight
- Activity
- Skin
- Sleeping pattern

- Anthropometric measurements with standard growth chart
- Feeding pattern

MATERIALS AND METHODS:

After taking parents consent ,a newborn baby born at our centre enrolled for the study, and evaluated as per the mentioned assessment critera on the follow up dates at our centre opd and observations were noted accordingly.

CASE DISCUSSION:

- A Full term (IUGR), 5 days old male baby with complaints of -
 - 1) Dry skin
 - 2) Interrupted sleeping pattern
 - 3) Interuppted feeds.
 - 4) Excessive cry.

BIRTH HISTORY:

- 2nd gravida/full term normal delivered baby (IUGR)/Birth wt- 2.350kg /CIAB- cried immediately after birth /colour- pink/ euthermic .
- On the first visit ,day of life 5th ,baby presented with the above complaints.
- The baby was examined in detail for any other abnormalities, sickness or illness. Baby was vitally stable

ON EXAMINATION(on day 5) :

• No signs of respiratory distress, convulsions, vomiting or GER episode .

- No icterus/ no pallor , Moderate activity +,
- Reflexes -: Sucking -good and Swallowing reflex Present
- **SLEEPING PATTERN:** short span of sleep and interrupted
- SKIN : Decreased skin turgor , dry skin ,dehydration +
- **FEEDING PATTERN :**interrupted feeds.
- **IRRITABILITY** Dehydration + , intermittent excessive cry
- ANTHROPOMETRIC MEASUREMENT:

Table No 1: ANTHROPOMETRIC MEASUREMENT

Particulars	Quantity
WEIGHT	2.350 kg
HEAD CIRCUMFERENCE	32.5 cm
CHEST CIRCUMFERENCE	30 cm
LENGTH	44 cm
MIDARM CIRCUMFERENCE	8 cm
THIGH CIRCUMFERENCE	12 cm

(Source:Primary Data)

ASSESSMENT CRITERIA FOR EVALUATION:

- 1) Skin
- 2) Activity and feeding pattern
- 3) Sleeping pattern
- 4) Weight
- 5) Head circumference
- 6) Chest circumference
- 7) Mid arm circumference
- 8) Thigh circumference
- 9) Lenth

RESEARCH METHODOLOGY :

- **Type of study :** A case study.
- **Study centre** : OPD , Department of kaumarbhritya, Saptashrungi ayurved hospital, Kamalnagar, Hirawadi, Nashik.
- Duration details:

Baby was given abhyanga once daily, in morning before giving bath.

• Follow up days :

 1^{st} follow up on age of 15^{th} day .

 2^{nd} follow up at 1 month age .

 3^{rd} follow up at the age of 3 months

Table No 1: Follow Up data

Follow up dates	Skin	Activity and feeding pattern	Sleeping pattern	
10 /7/18	Colour –pink Dry skin Turgor decreased	Moderate activity . intermittent cry between the feeds	Disturbed sleep and irritability	
20/7/18	Skin colour – good, lusture better	Upper and lower limb movements –better, cries for feed.	sleep span- better	
6 /8/18	Colour –pink Good lusture Hydration fair.	Breast feeding better ,limb movements –good	Takes good nap after feeds , abhyanga and bath irritability decreased	
6/10/18	Skin- pink colour lusture improved,hydrati on fair.	Active breast feeding ,muscle tone and activity –good.	Sound sleep with Less interruptions.	

(Source:Primary Data)

Table no 3: Anthropometry at birth , $15^{^{\rm TH}}\,\text{DAY}$, 1 MONTH ,3 $^{^{\rm RD}}$ MONTH AGE

Follow	Height	Weight	Head	Chest	Midarm	Thigh
up dates	-		circumference	circumference	circumference	circumference
6/7/18-	44cm	2.350	32.5 cm	30 cm	8 cm	12cm
at birth	kg		52.5 cm	50 cm	0 cm	12011
20/7/18-	47cm	2.660 kg	33.9 cm	32 cm	9 cm	13.5cm
15 th day	r, em	2.000 kg	55.7 G	52 c m	y om	10.0011
6/8/18	50 cm	3.200 kg	35.8 cm	34 cm	11.5 cm	15.5cm
1 month	50 cm	5.200 kg	55.6 cm	51011	11.5 011	15.5011
6/10/18						
3 rd	56cm	4.920 kg	39.7 cm	37.5cm	14.2 cm	20.7 cm
month						

(Source:Primary Data)

SOP METHOD OF ABHYANGA IN NEWBORNS:

Mother was advised the following steps:

Step 1:

luke warm bala taila taken, by keeping the bottle in warm water bath was used for

abhyanga. Testing the temperature on the back of the hand before applying on the baby.

Step 2:

Hand washing with antiseptic soap and drying with a sterile towel. Pouring some oil in palm and dip fingertips into the warm oil and applied lightly to the entire body. Waited for 4-5 minutes to let some of the oil get absorbed into the skin. And then massaging the entire body applying even pressure with the whole palm rather than the fingers.

Step 3:

Applying light pressure on the sensitive areas such as abdomen or heart. Using more oils and spending more time at nerve endings, sole of feet and palm.

Step 4:

Circular motions over the rounded areas such as head and joints. Using straight strokes on straight areas such as the arms and legs.

Abhyanga was done with adequate caution :- no pulling of limbs and crossing the legs or the arms.

- No hyperflexion or hyperextention of any body part

Post abyanga- baby relaxes for 10-15 minutes and then given warm water bath after one hour in morning.

OBSERVATIONS :

1. Newborn period is the most crucial phase of life ,so adequate care is required in this period for proper development of the baby. In ayurveda abhyanga is described as daily

routine practice (Dinacharya) to be followed for a healthy baby. Siddha bala taila possess many properties which is very essential for the baby.

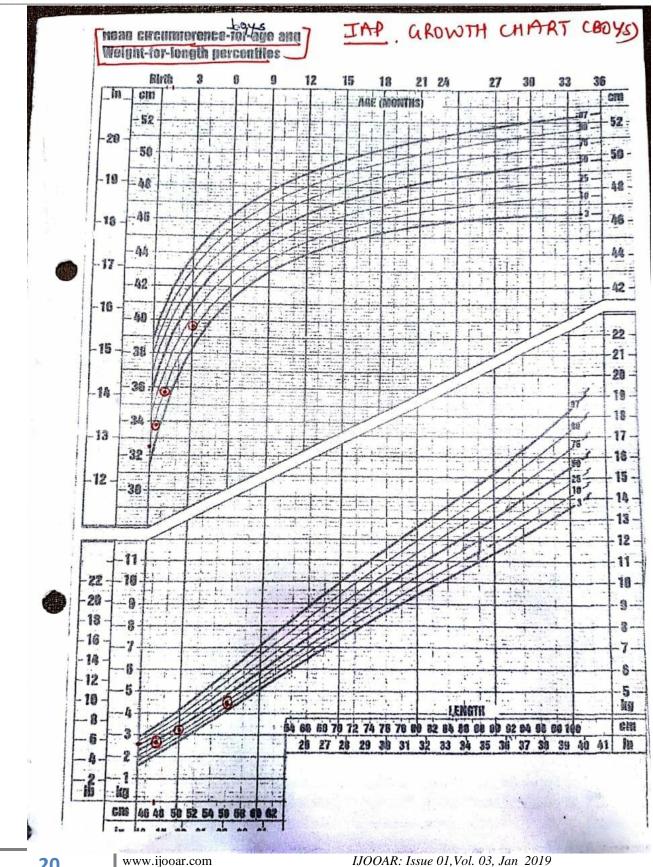
- 2. This present case study, shows that the snigdha (unctuous, oilyness) and picchil guna of bala taila4posseses vatashamak properties as vata is predominant in the skin.Bala tail, the name itself says "bal" which means strength. Abhyanga with bala taila in the prescribed manner with circular motion and straight stokes provides strength and maintains the body temperature of the baby.
- 3. Abhyanga with bala taila is responsible for dhatuposhan, jeevaniya gana dravya has the property to bring out cell division which is excellent for body tissues.
- 4. It also resulted in improvement in the activity of the baby i.e proper upper limb and lower limb movements. It relaxes the baby and relieves fatigue of the baby, abyanga possess shram hara5properties which in turn reduced irritability (intermittent excessive cry) of the baby.
- 5. The betterment seen in the skin complexioni.e abhyanga is(varnaprad),the ingredient of bala taila yava, agaru possess lekhana properties ,cleanses the skin from germs or dirt (mrujaprad)and its vatashamak property thereby showed improvement in the skin colour,tone, texure6 and reduced the dryness and roughness of the baby's skin.
- Bala taila abhyanga is "swapnakara" and karnashulaghna5 helped the baby to get adequate sleep. It is found to be useful in promoting uninterrupted sleep in between two feeds.

- 7. Abhyanga possess the property of "pushtikara"5 which helped in nourishment of all the seven dhatus of body, which improved the activity and alertness of the baby. Taking more time for abhyanga over the neve endings and muscles also improved the muscle mass and musculoskeletol activity of the baby. Changes noted increase in midarm circumference and thigh circumference of the baby.
- 8. Tail abhyanga is responsible for "kapalaindriya tarpan" 5 i.e applying oil on the head (shirobhyanga) nourishes the majja dhatu that helps in brain growth and changes noted increase in head circumference of the baby.
- 9. Abhyanga, increases the vagal activity in baby ,which in turn increases the gastric motility and thereby weight gain7. In the present study weight is seen increasing on every follow up. On IAP chart ,weight for length percentiles lies on 25th percentile in an increasing manner. Head circumference for age in months is leading from 10th to 25th percentile also shows an increasing pattern.

DISCUSSION AND CONCLUSION :

Abhyanga is one the scientific and effective approach in newborn care protocols. Abhyanga with Bala taila was found to be very efficacious in reducing irritability of the baby, improving the feeding pattern of the baby and thereby maintaining hydration status of baby, promoting uninterrupted sleeps between the two feeds.Practicing Abhyanga with Bala tailafrom birth to infantile age regularly in right manner with adequate precaution helps in achieving healthy growth and development of the baby.

Vd. Shilpa Panday & et al. Evaluation Of Bala Tailabhyanga In Development Of Newborn Baby - A Case Study



20

REFERENCES:

- 1. Dr.G Shrinivas Acharya, Panchkarma illustrated, Chaukhamba Sanskrit PratishthanDelhi, first edition 2006, reprinted :2009,2013,2015
- 2. Astang samghraha sharira sthana,adhyaya 4/51,with hindi commentary by Kaviraj Atridev Gupta,Krishna Das academy, Varanasi,vol -1,reprint 1993.
- 3. Astang Hridayam ,Sutra sthana ,adhyaya 2/8, Editor Dr. Bramhanand Tripathi Chaukhamba Sanskrit pratishthan Delhi,2007, pg-29.
- 4. Acharya Priyavrat Sharma,Dravyagun vigyana–2nd part,chaukhamba bhartiya academy,Varanasi,2001,pg no-735
- 5. Astang samghraha sutra sthana, adhyaya 3/56-60, Editor Kaviraj Atridev Gupta,Krishna Das academy, Varanasi,vol-1, reprint 1993,pg-29.
- 6. A RCT of balataila abhyanga versus coconut oil massage in physiological transition of newborn. *jof Ayurveda and Hol Med (JAHM)*.2014;2
- Tiffany Field, Miguel Diego and Maria Hernandez-Reif. Preterm Infant Massage Therapy Research: A Review . Infant Behav Dev. PMC Apr 1,2011. APR 2010; 33 (2): doi:10.1016/j.infbeh.2009.12.004.cited on 08/08/13.