

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

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ABSTRACT

background : Although oil massages has been practiced in newborns traditionally in many communities of India , however the scientific role of *abhyanga* which is mentioned in *jatamatraparicharya* of ayurveda for the proper growth and development of newborns has not been reviewed well. *Bala taila* is the best remedy for newborn *abhyanga*, hence present case study is taken to evaluate the effect of *bala tail abhyanga* in development of newborn baby.

Aim and objectives : 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 criteria on the follow up dates at our centre opd and observations were noted accordingly. Follow up : on 15th day , 1st month and 3rd month

Observation: *Bala taila abhyanga* done daily once in morning. observations were made as per the changes seen in the assessment criteria and growth graph at every follow up. On the final day of follow up, baby's weight, length , H.C was improved and seen in normal plain on the growth graph(chart). Drastic improvement seen in activity, skin colour, sleep pattern,feeding pattern. Muscle mass increment seen on the basis of mid arm circumference and thigh circumference. In this present case study shows that *guru snigdha* properties of *bala tail* taken care of dhatupushti of this baby. Regularly twice *abhyanga* in baby with *bala tail* showed advancement in growth and development of baby.

Conclusion: *Bala tail abhyanga* if practiced routinely found to be effective in development of newborn baby.

Keywords : *abhyanga* , *jatamatraparicharya*, newborn , *bala tail*

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 preferred for massages in infants and newborns, whereas in south Indian regions coconut 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 kalpana² 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 oil one by one to each parts of the body with minimal pressure in particular way with 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 "*Abyangmacharetnityam*"³ as daily practice of abyanga therapy .

CASE DISCUSSION:

A Full term (IUGR), 5 days old male baby with compliants 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/ eutermic .

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

ANTROPOMETRIC MEASUREMENT:

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

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

Type of study : A case study.

Aims and objective : 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

Study centre : OPD , Department of kaumarbhritya, Saptashruni ayurved hospital, Kamalnagar, Hirawadi, Nashik.

Duration details:

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

Follow up days :

1st follow up on age of 15th day .

2nd follow up at 1 month age .

3rd follow up at the age of 3 months

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,hydration fair.	Active breast feeding ,muscle tone and activity – good.	Sound sleep with Less interruptions.

ANTHROPOMETRY AT BIRTH , 15TH DAY , 1 MONTH ,3RD MONTH AGE

Follow up dates	Height	Weight	Head circumference	Chest circumference	Midarm circumference	Thigh circumference
6/7/18- at birth	44cm	2 .350 kg	32.5 cm	30 cm	8 cm	12cm
20/7/18- 15 th day	47cm	2.660 kg	33.9 cm	32 cm	9 cm	13.5cm
6/8/18 1 month	50 cm	3.200 kg	35.8 cm	34 cm	11.5 cm	15.5cm
6/10/18 3 rd month	56cm	4.920 kg	39.7 cm	37.5cm	14.2 cm	20.7 cm

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 hyperextension of any body part

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

Observations :

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.

This present case study , shows that the snigdha (unctuous, oiliness) and picchil guna of bala taila⁴ possesses 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 strokes provides strength and maintains the body temperature of the baby. 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. 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 , abhyanga possess shram hara⁵ properties which in turn reduced irritability (intermittent excessive cry) of the baby.

The betterment seen in the skin complexion i.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, texture⁶ 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.

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 nerve endings and muscles also improved the muscle mass and musculoskeletal activity of the baby. Changes noted increase in midarm circumference and thigh circumference of the baby.

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. 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.

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 taila from birth to infantile age regularly in right manner with adequate precaution helps in achieving healthy growth and development of the baby.

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Mean circumference-for-age and
Weight-for-length percentiles

IAP . GROWTH CHART (BOYS)

