

## Journal Homepage: -www.journalijar.com

# INTERNATIONAL JOURNAL OF **ADVANCED RESEARCH (IJAR)**



Article DOI:10.21474/IJAR01/8818 **DOI URL:** http://dx.doi.org/10.21474/IJAR01/8818

## RESEARCH ARTICLE

## A CRITICAL REVIEW OF CLASSICAL NAVAJATA SHISHU PARICHARYA W.S.R. TO BASIC NEWBORN RESUSCITATION.

\*Chuman Lal Bhaskar<sup>1</sup>, Dobariya Miral R.<sup>1</sup>, Sonam Chaudhary<sup>1</sup>, K. S patel<sup>2</sup> and V. K. Kori<sup>3</sup>.

.....

- PG Scholar, Department of Kaumarbhritya I.P.G.T. & R.A., GAU Jamnagar Gujarat, India.
- HOD Kaumarbhritya Department, I.P.G.T. & R.A., GAU Jamnagar Gujarat, India.
- Asso. Professor Kaumarbhritya Department, I.P.G.T. & R.A., GAU Jamnagar Gujarat, India.

## Manuscript Info

## Manuscript History

Received: 05 February 2019 Final Accepted: 07 March 2019 Published: April 2019

## Key words:-

Navajata Shishu Paricharya, Ulvaparimarjana, Pranapratyagamana, Nalachhedana, Basic Newborn Resuscitation

## Abstract

**Introduction** – A Newborn is a child under 28 days of age and this is most vulnerable period. Care of the newborn right from just after birth till the first feeding has been described by the classical text of Ayurveda. As per Ayurveda, Navajata means Sadyojata (Just born child). Various procedures were advice in the management of Newborn child by Acharya with few differences in opinion regarding the sequences of those procedures. The steps of Navajata Shishu Paricharya are Ulvaparimarjana, Pranapratyagamana, Nalachhedana, Pichudharana, Garbhodaka Vamana etc. These procedures of Navajata Shishu Paricharya revealing their scientific relevance and utility in care of Newborn. These steps are important for the Newborn for preventing birth asphyxia, incidence being 1-6 per 1000 live birth.

Material And Methods - Review from diverse conventional Ayurvedic literatures, Pediatric books, Magazines, Internet and Research Journals.

**Discussion** - The measures of newborn care described in our ancient texts indicate their wisdom regarding resuscitation, prevention of hypothermia; maintain hygiene, prevention of infection, promotion of rooming in and early initiation of breast feeding. Through with the advent of newer scientific knowledge and technologies, this practice has become obsolete these days, vet understanding of Navajata Shishu Paricharya proves it to be the foundation stone and base of neonatal care.

**Conclusion-** Neonatal period is very crucial phase of life. One has to provide systemic, luxurious and sophisticated neonatal care. Various profounder of Ayurveda have described the care of newborn in their own measure yet its essence is the same and moreover in its intent herald the modern day neonatology. Healthy Newborn goes to healthy human being results into ultimate healthy nation.

Copy Right, IJAR, 2019,. All rights reserved.

Neonatal resuscitation means to revive or restore life of a baby from the state of asphyxia. Approximately 10% of newborn require some assistance to begin breathing at birth [1]. Navajata Shishu Paricharya is the care of newborn

Corresponding Author:- Chuman Lal Bhaskar. Address: - PG Scholar, Department of Kaumarbhritya I.P.G.T. & R.A., GAU Jamnagar, Gujarat, India. right from just after birth till the first feeding. *Ulvaparimarjana*, *Pranapratyagamana*, *Nabhinalachedana* etc. has been described by the different classical texts of Ayurveda. These procedures revealing their scientific relevance and utility in care of newborn. *Navajata Shishu Paricharya* (Care of newborn) has found detailed mention in both Ayurvedic and modern texts. In ancient Ayurvedic texts, Acharya's have given prime importance to care of newborn (*NavjataShishuParicharya*) which starts from birth to viable stability of the newborn. In general, the care of a normally delivered newborn at birth includes prevention of asphyxia, hypothermia, early rooming in and initiation of breast feeding. Various procedures were advised in the management of newborn child by *Acharyas* with a few differences in sequences of these procedures [2]. Neonatal resuscitation means to revive or restore life to a baby from the state of asphyxia. The aim of neonatal resuscitation is necessary to ventilate a newborn baby that is not breathing and protect the life of baby. Ninety percent of newly born babies make the transition from intrauterine to extra uterine life without difficulty. Any baby can have breathing difficulties at birth. It is important to anticipate and be prepared for this eventuality in all deliveries [3].

## Aim & Objective:-

Comparison of classical Navajata Shishu Parichaya with basic resuscitation of newborn care in advance medical science.

#### **Material and methods:**

Review of *Navajata Shishu Paricharya* from classical Ayurvada literatures and Database described on Internet i.e. Pubmed, Medline.

#### Discussion:-

The Different Steps of Navajata Shishu Paricharya are Mentioned By Acharya's [4][5][6]

Charaka	Sushruta	Vagbhatta
Pranapratyagamana	Ulvaparimarjana	Ulvaparimarjana
Snana	Mukhavishodhana	Pranapratyagamana
Mukhavishodhana	Pichudharana	Nalachhedana
Garbhodakavamana	Nalachhedana	Snana
Nalachhedana	Jatakarma	Pichudharana
Jatakarma	Snana	Suvarnaprashana
Rakshakarma		Garbhodakavamana
		Jatakarma

## PRANAPRATYAGAMANA [7]

अश्मनोःसंघटनकर्णयोम् ल शीतोदकेनउष्णोदकेनवमुखेपरिषेक कृष्णकपालिकशुर्पेनअभिनिष्पुणीयात दक्षिणकर्णमुलेमन्त्रोच्चारन ।

(च.शा.8/42)

Acharya Charaka mentioned different procedures to be conducted immediately after birth in case of Achesta Shishu (Baby showing no signs of life at birth). For Stimulation of respiration following procedures to be done.

## **अश्मनोः संघटनकर्णयोमुल**

Sensation from peripheral parts to sensory tract  $\Longrightarrow$  Fibers reach in hypothalamus and cross to Opposite side  $\Longrightarrow$  Gives branch to respiratory center and stimulate it.

In modern method of Resuscitation stimulation of respiration by sensory stimulation, they are... By drying (cleansing and stimulation).

By striking the palms and soles (pressure and pain).

Rubbing the back (direct stimulation of sensory pathway).

## मुखपरिसेचन (Mukhaparisechana)[8]

Hot and cold water should be sprinkled over the face of baby alternatively according to season. Sprinkling of Hot or Cold water may stimulate the thermo receptors present over face region. Blood circulation is maximum in face area, supplied by external carotid artery which connects with internal carotid artery. Which contain baroreceptors, role of baroreceptors in stimulation of respiration this method is useful only in state of primary apnea and may be given for two or three times.

# कृष्णकपालिकाशुर्पेणअभिनिष्पुणीयात (Krishna Kapalika Shurpa Abhnispuniyata)[9]

Black colored broken earthen pots and winnowing basket for fanning. Ventilating the baby by using room air which contains 21% of oxygen replaces the impure air and creates negative pressure on spot, fresh air being sucked. This should be done till the baby completely revives. This provides initiation of respiration and optic nerve stimulation in depressed or floppy baby. During this procedure precaution should be taken to avoid hypothermia due to heat loss mainly by convection. However, these stimulations are not sufficient to stimulate vital centers for their normal function in the baby, who is suffered from secondary apnea [10].

#### **ULBA-PARIMARJANA**

jatmaÇ< ivzae yaeLbaÓal< sENxv sipR;//a, àsUitKleizt< canu blatElen secyet!.

 $(A^{\hat{}} \dot{u}^{\hat{}} \%^{\hat{}} 1/10)$ 

Ulba refers to *jarayu* or fetal membranes like amniotic membrane and hence at some places it has been also as amniotic fluid. This is thick sebaceous mucoid secretion hence *Saindhava* and *Ghrita* help to remove this by lubricating the tract and liquefying the secretions.

Vernix caseosa which is a sticky secretion covering all over the body and plays an important role in maintaining temperature of the newborn baby. According to Sushruta Samhita Ulva and *Mukha* should be cleaned with rock salt and *Sarpi* [11].

## GARBHODAKAVAMANA [12]

## सैन्धवोपहितेनसर्पिषाकार्यप्रछर्दनम ।

(च.शा.8/42)

Acharya explains that *Garbhodaka Vamana* by applying the *Saindhava* and *Ghrita* in the mouth (buccal cavity) of baby. Nowadays this process has been replaced by the aspiration of amniotic fluid followed by the proper stomach wash with normal saline at birth the nasogastric tube [13].

## NABHINALAKARTANA [14]

स्वस्थीभूतस्यनाभिंचसूत्रेणचतुरङ्गुलात। बदध्वोध्ववर्धयित्त्वाचग्रीवायामवसंज्येत॥

(3.ह.3.1/5)

Cutting of cord should be done once the baby is stabilized. It should be cut at 4 *Angula* lengths by *Ardhadhara Shastra* after tying with cotton thread and encircle it around the neck. Upward hanging of distal of the cord usually rests in contact of the skin of abdomen above the umbilicus which helps in prevention of oozing from the umbilicus during and after the cord fall. It is probably, due to kinking of the umbilical vein. This technique is also found effective in prevention of umbilical cord infection by keeping the umbilical cord away from the urine or stool so that it can't get contaminated [15].

## MUKHAVISHODHANA [16]

## ततोदक्षिणतर्जन्यातालूनम्न्यावगुन्ठयेत ।

(अ.इ.उ.1/7)

Byindex finger of right hand, after trimming nails and washing, *Talu* should be lifted up and oral cavity should be cleaned to its maximum extent. Cleaning oral cavity, nose not only maintains patency but also initiates respiration by sensory stimulation.

SHIROPICHU [17]

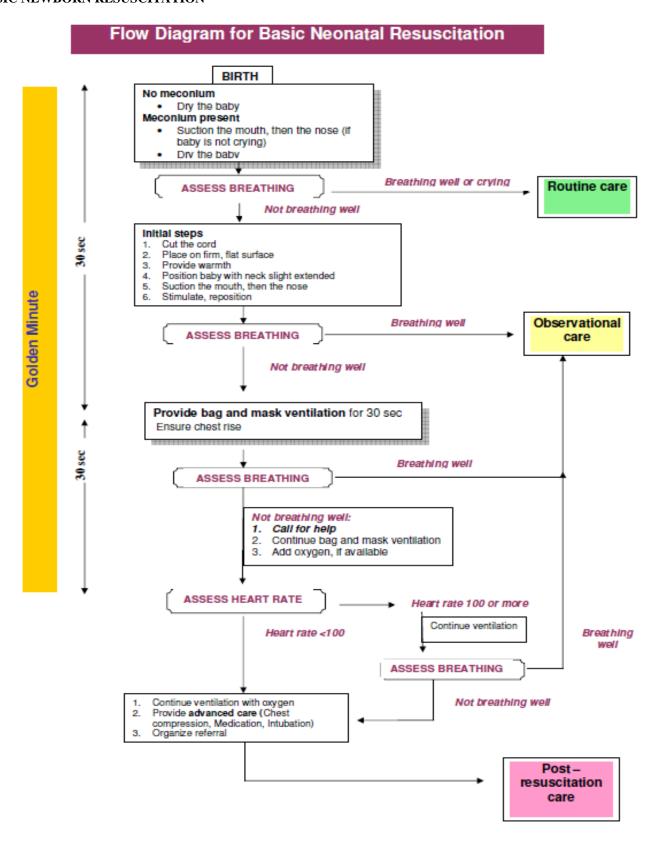
## शिरसिस्नेहपिचुना......

(**अ.ह.**3.1/8)

Keeping a cotton piece soaked in oil over the head of the baby is called *Pichudharana*. By *Shiropichu* prevention of heat loss through the head region. *Pichu Dharana* well explained by Acharya Susruta. *Kavalika* has to be dipped in the oil medium like *Bala Taila* and kept in the *Bramha Randhra Pradesha* (anterior fontanel).

This may be aimed to prevent heat loss and hypothermia during resuscitation as maximum heat loss takes place through the scalp and forehead area. *Kavalika* cover this area. *Taila* is good for suppression of *Vata* <sup>[18]</sup>.

## BASIC NEWBORN RESUSCITATION [19]



## INTERPRETATION - AYURVEDA AND MODERN $^{[20]}$

Nabhinal Chhedana - Umbilical cord cutting
Shiropichu, Abhayanga - Maintain temperature
Udaken Mukhe Parisheka, Ashmano Sanghatana - Stimulation
Krishna Kapalika Shurpa Abhnispuniyata - Ventilation
Garbhodak Vamana - Stomach wash
Mukha Vishodhana - Clear the airway

#### **Conclusion:-**

The first minutes after birth are critical to reduce neonatal mortality. The measures of new born care describe in our ancient texts indicate their wisdom regarding resuscitation, prevention of hypothermia; maintain hygiene for prevention of infection and normal breathing.

Various *Acharya* have described the care of newborn in their own measure yet its essence is the same and moreover in its intent heralds the modern day neonatology. The steps described by *Acharya* are close to modern day principles of newborn care and basic resuscitation of new born baby. It means principle of Newborn care is not changed but now a day's used in a modified way.

#### **References:-**

- 1. Pediatrics.appublication.org content, Pediatrics November 2010, volume 126 / issue 5 from the American academy of Pediatrics special report.
- 2. Karam Singh et al. UJAHM 2013, 01 (03): P. 6-12.
- 3. Ministry of Health and Family Welfare, Government of India. Navjaat Shishu Suraksha Karyakram, Published on 24/10/2018, Chapter no.1, p. 2.
- 4. Sri Satya Narayana Sastri, Pt. Kasinatha Sastari CharakaSamhita, Chaukhambha Bharati Academy edition 2014, Vol. I, *Sharira Sthana*, Chapter no. 8, verse 42-47, P. 947-950.
- 5. Maharashi Susruta Kaviraja Ambikadutta Shastri, Susruta Samhita, Chukhambha Sanskrita Sansthan Varanasi, Reprit edition 2014, Vol. I, *Sharira Sthana*, Chapter no. 14, verse 17 & 26, P. 102-103 & 105.
- 6. Dr. Anna Moreswara Kunte, AstangaHrdayamChaukhambha Orientalia Varanasi Reprit edition 2015, Vol. II, *Uttara Sthana*, Chapter no.1, verse 1-14 & 25 & 27, P. 777-779.
- 7. Sri Satya Narayana Sastri, Pt. Kasinatha Sastari CharakaSamhita, Chaukhambha Bharati Academy edition 2014, Vol. I, *Sharira Sthana*, Chapter no. 8, verse 42-47, P. 947.
- 8. Sri Satya Narayana Sastri, Pt. Kasinatha Sastari CharakaSamhita, Chaukhambha Bharati Academy edition 2014, Vol. I, *Sharira Sthana* Chapter no. 8, verse 42, P. 947.
- 9. Sri Satya Narayana Sastri, Pt. Kasinatha Sastari CharakaSamhita, Chaukhambha Bharati Academy edition 2014, Vol. I, *Sharira Sthana*, Chapter no. 8, verse 42, P. 947.
- 10. Dr. Brij Mohan Singh, Text book of Bala Roga Kaumarbhritya, Chaukhambha Orientalia Varanasi First edition 2015, Vol. I, Chapter no. 6, P. 241.
- 11. Maharashi Susruta Kaviraja Ambikadutta Shastri, Susruta Samhita, Chukhambha Sanskrita Sansthan Varanasi Reprit edition 2014, Vol. I, *Sharira Sthana*, Chapter no.10, verse 12, P. 102.
- 12. Sri Satya Narayana Sastri, Pt. Kasinatha Sastari CharakaSamhita, Chaukhambha Bharati Academy edition 2014, Vol. I, *Sharira Sthana*, Chapter no. 8, verse 42 P. 947.
- 13. Dr. Brij Mohan Singh, Text book of Bala Roga Kaumarbhritya, Chaukhambha Orientalia Varanasi First edition 2015, Vol. I, Chapter no. 5, P. 208.
- 14. Dr. Anna Moreswara Kunte, AstangaHrdayamChaukhambha Orientalia Varanasi Reprit edition 2015, Vol. II, *Uttara Sthana*, Chapter no.1, verse 5, P. 777.
- 15. Dr. Brij Mohan Singh, Text book of Bala Roga Kaumarbhritya, Chaukhambha Orientalia Varanasi First edition 2015, Vol. I, Chapter no. 5, P. 209.
- 16. Dr. Anna Moreswara Kunte, AstangaHrdayamChaukhambha Orientalia Varanasi Reprit edition 2015, Vol. II, *Uttara Sthana*, Chapter no.1 verse 7, P. 777.
- 17. Dr. Anna Moreswara Kunte, AstangaHrdayamChaukhambha Orientalia Varanasi Reprit edition 2015, Vol. II, *Uttara Sthana*, Chapter no.1, verse 8, P. 777.
- 18. Dr. Shrinidhi. K. Acharya, Acharya's Text Book of Kaumarbhritya, Chaukhambha Orientalia, First Edition, 2016 Vol. I, P. 358.

- 19. Ministry of Health and Family Welfare, Government of India. Navjaat Shishu Suraksha Karyakram, Published on 24/10/2018, Chapter no.1, P.7.
- 20. Dr. Shrinidhi. K. Acharya, Acharya's Text Book of Kaumarbhritya, Chaukhambha Orientalia, First Edition, 2016, Vol. I, P. 360.