

NEONATAL JAUNDICE AND AYURVEDIC APPROACH FOR ITS MANAGEMENT – A REVIEW ARTICLE

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ABSTRACT

Jaundice is the most common abnormal finding during early neonatal period. In most of the cases, level of serum bilirubin is not raised that much so as to cause fatal brain damage. It is the most common disease during neonatal period occurring mostly due to increased hemolysis, decreased hepatic clearance, enterohepatic circulation, immaturity, blood group incompatibility and infections. Its Ayurvedic management includes use of proper antenatal care, *Suryadarshana*, *Chandradarshana*, *madhu* mixed with *ghrita* or *ananta* with *madhu* and *ghrita*, *Stanyashodhak chikitsa* and some medicines likes *Kumarkalyana rasa*, *Triphala*, *Guduchi* and *Nimbpatra swarasa*.

INTRODUCTION

Jaundice is the yellow discoloration of the skin and sclera due to raised serum bilirubin. It is the most common abnormal finding during early neonatal period.¹ Most of the cases of neonatal jaundice are physiological and the level of serum bilirubin is not so much raised to cause fatal brain damage due to bilirubin encephalopathy but every case of neonatal jaundice should be managed very sincerely to prevent such consequences because of poor brain blood barrier during neonatal period. Though modern science has developed many modalities to manage neonatal jaundice but Ayurvedic approach for its prevention and treatment is not less important.

Why jaundice is more prevalent during newborn period?

If we assess neonatal jaundice according to adult parameter of jaundice estimation, it seems that most neonates get jaundiced. It is due to physiological polycythemia, shorter lifespan of fetal RBC, limited hepatic uptake, conjugation and excretion of bilirubin due to transient deficiency of receptor proteins and UDPGT enzyme in newborn especially in premature. It is also due to paucity of bacterial flora in the gut and over activity of beta-glucuronidase enzyme in the newborn. So the increased bilirubin production, reduced hepatic clearance and enhanced enterohepatic circulation are the sole causes of increased prevalence of jaundice in newborn.²

Causes of neonatal jaundice: Most common causes of neonatal jaundice in India in order of incidence are physiological jaundice, immaturity, blood group incompatibility, antena-

tal and postnatal infections, G-6PD deficiency, cephalohematoma, certain drugs and breast milk jaundice.² In about one third cases the causes of neonatal jaundice are still unknown. The main textbook on Ayurvedic pediatric, *Kashyapa Samhita* describes the feature of jaundice as yellow discoloration of the eyes, nails, face, stool and urine with laziness (*nirutsah*), loss of digestive power (*nastagni*), desire to take blood (*rudhirspraha*).³ *Pishachi Jataharini* which is known to its yellow colour causes death of the baby after delivery on first day.⁴ Another reason is *Paittik Stanyadusti* especially *Durgandhit Stanyadusti*⁵. Baby feeding on milk vitiated by *Pitta* dosha also produces symptoms such as excessive thirst, feverish body, sweating and loose motion.⁶

Ayurvedic approach for the management of neonatal jaundice: Firstly it is important to diagnose the probable physiology and pathology of jaundice. Baby should be clinically screened minimum twice a day from the birth in a good day light and its appearance, rate of increase and severity should be estimated so that starting of modern management like phototherapy and blood transfusion if needed could be done to prevent fatal bilirubin encephalopathy.

- **Use of proper antenatal care to the mother** Avoidance of *pitta* vitiating *ahar vihar* during pregnancy and after delivery, Avoidance of *dhoompana* (smoking) and *swedana* because it may produce *vivarnata* (discolorations) to the fetus.⁷ Use of Ayurvedic drugs for the common problem of pregnant mother in spite of harmful allopathic drugs. *Ajeerna* (*indigestion*) should be avoided during lactation.
- ***Suryadarshana* and *Chandradarshana*** In *Kashyapa Samhita* there is indication of *Suryadarshana* (putting the baby in sunlight)

and *Chandradarshana* (putting the baby in moonlight) of baby during 1st month of life. It may be a type of phototherapy for preventing the neonatal jaundice on that time. *Suryadarshana* and *Chandradarshana* to the baby during 1st month of life shows that Acharya Kashyapa knew well about the need of light for the newborn baby.⁸

- **Use of *jatakarma samskar***^{9,10}

In this ceremony, there is use of madhu mixed with ghritha⁹ or ananta with madhu and ghritha^{11, 12}. Initiating early feeding with madhu-ghrita may help in disturbing the enterohepatic circulation which is an important cause of neonatal jaundice in exclusively mother milk fed babies. Besides interrupting enterohepatic circulation of bilirubin, madhu-ghrita also provides nutrients and energy which is helpful to maintain glucose level and immunity, ultimately maintaining the general condition of the body.

Acharya sushruta and Vagbhatta described 1st three days regime after birth.^{11, 12} First day *Ananta* with *Madhu sarpi* thrice, on second and third day *Ghritha* medicated with *Lakshmana*. Exclusively breast fed babies are likely to have higher bilirubin level due to inadequacy of lactation during 1st three days of life.¹³ This three days regime help in this condition.

***Stanyashodhak chikitsa* to the lactating mother** *Paittik stanyadusti*, especially *durgandhit stanyadusti*⁵ is one of the important causes for neonatal jaundice so there is need to treat this via the use of *pittashamak ahar vihar* to the mother. Mother should be advised to take-

- a. *Karkatshringi, ajshringi, triphla, rajani, vacha* with *sheetambu*.¹⁴
- b. Powder of *dhatri, trikatu* and *haritaki* with *madhu*.¹⁵ Paste of below mentioned medicines should be applied over the breasts

kept until dry. After drying of *lepa* and washing it off from breast with water, baby should be fed. Composition of *lepa* may be –¹⁶

- a. *Sariva, usher, manjishtha, sleshmataka and raktachandana* or
- b. *Tejpatra, sugandhabala, raktachandana and usheer.*

Some useful medications: There is a large description is found in ayurvedic literature indicating aetiopathogenesis, prevention, principles of management and medications of jaundice. These measures can be applied in case of newborn very cautiously. Some medications which may prove beneficial in case of newborn jaundice are as follows-

Kumarkalyan rasa:¹⁷*Triphla*, *guduchi* or *nimb patra swarasa* with honey.¹⁸ *Haridradi ghrita*¹⁹ *Munda lauh bhasma*²⁰, *mandoor bhasma*²¹ or *punarnava mandoor*. Coconut oil: most important as conservative management in case of hepatitis or in obstructive jaundice.²² As it contains medium chain triglycerides and there is no need of bile for its absorption, giving energy and other fat soluble nutrients to the body.

CONCLUSION

Jaundice is the most common disease during neonatal period mostly due to increased hemolysis, decreased hepatic clearance, enterohepatic circulation, immaturity, blood group incompatibility, infections, *pattik stanyadusti* or excessive *vitiation* of *pitta* in the body. Ayurvedic management of newborn jaundice mostly comprises of proper antenatal care, *Suryadarshana* and *Chandradarshana*, use of *madhu* mixed with *ghrita* or *ananta* with *madhu* and *ghrita*, *Stanyashodhak chikitsa* and some medicines likes *Kumarkalyan rasa*, *Triphla*, *guduchi* or *nimbpatra swarasa* with honey.

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