

Effect of *Bhoomyamalaki (Phyllanthus Niruri) Kashaya* in Neonatal Jaundice – A Case Study

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Abstract

Neonatal jaundice is yellowish discoloration of sclera, mucus membrane and skin due to increased level of serum bilirubin in the blood. Incidence of Neonatal Jaundice is 60 to 80 % of total births in India. According to the modern science 'Neonatal jaundice' is managed by Phototherapy and Exchange blood transfusion method as per the level of serum bilirubin and weight of the newborn. A patient of neonatal jaundice was treated with Bhoomyamalaki (*Phyllanthus niruri*) kashaya 1.75 ml orally. Dose is calculated according to the Clark rule. Bhoomyamalaki has properties of virechana and pittanasak, so ayurvedic treatments with Bhoomyamalaki (*phyllanthus niruri*) kashaya was effective in case of Neonatal jaundice. The article focuses on details of a case of 'Neonatal jaundice' in opd and ipd of PG. department of kaumarbhritya of Govt. Ayurved College and Hospital Nanded.

Keywords

Neonatal Jaundice, Bhoomyamalaki kashaya, Phototherapy, Exchange blood transfusion



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INTRODUCTION

'Neonatal Jaundice' is a yellowish discoloration of skin, mucus membrane, urine and sclera due to increased level of serum bilirubin in the body. It is common condition in neonates that has a reported incidence 60 to 80 % of total birth. Apart from this, if it is untreated can result in significant mortality and morbidity.

Treatment protocols described in modern science for neonatal jaundice are 'Phototherapy' or 'Exchange blood transfusion' have more serious side effects. Therefore, there is scope for Ayurveda for treatment of neonatal jaundice.

Hereby presenting a case of neonatal jaundice caused due to increased level of indirect serum bilirubin in the body, in which she was treated with bhoomyamalaki kashaya 1.75 ml (calculated according to clark rule) orally BID for 5 days. She was cured completely after 5 days of treatment.

AIMS AND OBJECTIVES

AIM

- 1) To study the efficacy of Bhoomyamalaki kashaya in neonatal jaundice.
- 2) To judge kashaya administration in neonates and its tolerability.

OBJECTIVES

The pros and cons of treatment and its results on the disease, neonatal jaundice, are the objectives.

MATERIALS AND METHODS

- 1) A female child of age 2nd day having neonatal jaundice.
- 2) Bhoomyamalaki (*Phyllanthusniruri*) kashaya.

CASE REPORT

A female child of two days with birth weight 2.9kg was presented with yellowish discoloration of sclera, skin of face, neck, chest, abdomen and urine since one day. Under all aseptic precautions, venous blood was collected in bulb and sent to the lab for serum bilirubin level estimation. There was severe increased level of serum bilirubin. Other lab test including CBC, CRP was normal. As per the report of serum bilirubin level, under all aseptic precaution Bhoomyamalakikashaya 1.75 ml was given with dropper orally BID for 5 days. Serum bilirubin level estimation and baby was assessed on 3rd and 5th day of treatment. Patient had no complaints regarding yellowish discoloration of skin, sclera and urine. Serum bilirubin level was

significantly decreased at the end of 5th day of treatment.

PAST HISTORY

a) Birth history :-

A second gravida fullterm mother delivered a female child through vaginal route on 29/06/2015 at 9: 30 pm with birth weight 2.9 kg at Govt. Ayurved Hospital Nanded.

- Baby cried immediately after birth .
- Liquor was clear.
- APGAR score was 5 at birth and 8 after 1 minute after birth.
- No trauma during delivery.
- No sign of respiratory distress at birth.

b) History of present illness:-

Signs of Jaundice appeared on 2nd day of birth

c) Family history :-

- Paternal – NAD
- Maternal – no h/o any major illness.

LMP – 27/09/2014

EDD - 03/07/2015

Clinical Findings:-

Yellowish discoloration over face, chest, abdomen and sclera. *All vital signs were normal as follows*

BP – 70/ 40 mm of hg.

HR – 120/min.

RR – 46/min.

CTA – good.

- *Abdominal findings reveals as*

Mild abdominal distension present .

Mild hepatomegaly present.

Investigations :-

Serum bilirubin level done on 1st, 3rd, 5th day of treatment were as follows.

Day/Date of treatment	First (01/07/2015)	Third (03/07/2015)	Fifth (05/07/2015)
Direct serum bilirubin level	0 .70 mg%	1 .80 mg%	1. 01 mg%
Indirect serum bilirubin level	6 .77 mg%	4. 48 mg%	2. 01 mg%
Total serum bilirubin level	7 .47 mg%	6. 28 mg%	3. 02 mg%

Etiology

Pittakaraviharasevana by mother during ANC period increases Pitta dosha in the body, that vitiated pitta causes stanyadrusti, it was sevana by neonate causing bahupitta Kamala. Also this vitiated pitta causes raktadhatudrusti, as raktadhatu is more in neonates, it helps to increase kamala in neonates.

Management

- *External* :

Single surface phototherapy 2 hrs BID for 5 days.

- *Internal* :

Bhoomyamalakikashaya 1. 75 ml BID for 5 days.

Multivitamin drops (drop Mulmin) 5 drops BID for 5 days.

RESULTS

As neonatal jaundice occurs due to pittajdrusthstanyasevana by neonates, Bhoomyamalaki (Phyllanthusniruri) kashaya acts as pittarechaka, thus removes the vitiated pitta from the body. The effect of this combined therapy gives excellent result in case of 'Neonatal jaundice'.

DISCUSSION

Neonatal jaundice is yellowish discoloration of sclera, skin of the body and urine. It is the common condition in neonates, and important cause of mortality and morbidity rates in neonates. Because severe jaundice causes 'kernicterus' i.e., irreversible damage of brain tissues in the neonates. According to the modern science phototherapy and exchange blood

transfusion are the treatment protocols given as per increased level of serum bilirubin and weight of the baby.

According to the ayurveda, neonatal jaundice occurs due to pittajdrusthstanyasevana by the neonate, so Bhoomyamalakikashaya was given to eliminate vitiated pitta from the body.

The content of 'Bhoomyamalakikashaya' is Bhoomyamalaki (phyllanthusniruri) bharadchurna.

Formulation :-

Bhoomyamalakikashaya was prepared as per standard procedure given by acharya 'Sharangdhara' as follows –

One part of Bhoomyamalakibharadchurna and 16 parts of water taken and heated till it comes to the level of 1/8th of total. Bhoomyamalakikashaya was given as per calculated dose according to the clerk rule. Bhoomyamalaki shows pittanashak and virechak properties.

CONCLUSION

A combined therapy of single surface phototherapy and Bhoomyamalaki kashaya is useful for treatment of neonatal jaundice. As the result was found in one patient reported in this manuscript, there is a need

to be taken a clinical trial in large sample size for minute study and confirmation of mode of action of bhoomyamalaki. Bhoomyamalaki kashaya is toleratable in neonates.

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