

WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.453

Volume 13, Issue 12, 586-591.

Case Study

ISSN 2277-7105

A CASE REPORT: MANAGEMENT OF NABHIPAKA (UMBILICAL SEPSIS) IN NEONATES WITH JATYADI TAILA

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Article Received on 27 April 2024,

Revised on 17 May 2024, Accepted on 07 June 2024

DOI: 10.20959/wjpr202412-31174



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1. ABSTRACT

Umbilical cord care is a key factor in the newborn care also includes the mortality & morbidity globally. A newborn is prone to get infection due to multiple causes. So proper and adequate newborn care plays important role to avoid those infections and decreases neonatal mortality rates, because it has been observed the most of the neonatal death occurs due to sepsis. The detail care of umbilical cord is surely the precursor of recent neonatology. Ayurveda and modern sciences, both having the common aim of protecting the newborn and adapting it to worldly environment. Ayurveda explained the newborn care in a very scientific and careful manner under the heading of Jatakarma Paricharyavi. All protocols of this care are safe and effective liketying of the umbilical cord, cutting of umbilical cord, appropriate timing to cut the umbilical cord, how to cut the umbilical cord, shastra (instrument) to be use for cutting the umbilical cord. In ayurveda antimicrobial drug such as, medicated jatyadi taila and powder mentioned in umbilical cord care and are very useful in natural healing and to prevent the complications. ayurveda topical agents for the

umbilical cord care are traditionally in used since long time and possess all the gold standards of ideal antimicrobial agents like - potent antimicrobial, anti-inflammatory, and wound healing properties.

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2. **KEYWORDS:** Umbilical cord, infection, neonatology, *Jatyadi Taila*, *Nabhi Upakrama*.

3. INTRODUCTION

In developing countries, where most deliveries take place at home, some traditional practices such as applying unclean substances to the umbilical cord stump conflict with principles of cleanliness and greatly increase the risk of umbilical cord infection. globally there is cultural, social, geographical, racial and economic variation in the population, similarly, there is difference in the umbilical cord care practices in developed and developing countries, there is considerable debate among health care professionals on the most effective newborn umbilical cord care and researches abandoned the traditional use of antimicrobial soap and water or natural healing.^[1]

Acharya Charaka explained the care of umbilical cord *as nabhi upakrama* which includes the safe cutting and tying of umbilical cord, encircling the thread around neck which is tied to umbilical cord, and application of antimicrobial and wound healing agents to the umbilical cord stump. this *nabhi upakrama* is very rational as well as scientific even in today's technical era of medicine. there is no exclusive evidence based guideline for umbilical cord care which has global acceptance because of different lacunas of existing health care system. in such scenario ayurveda *nabhi upakrama* appears very useful, which are in practice since ancient times and there are no any adverse effects if applied in the proper manner. a brief description regarding *jatyadi taila* is found in *sharangadhra samhita*, medicated oils like *nabhipaka* have properties which are very useful in natural healing and to prevent the complications. ^[2,3]

jatyadi taila^[4]

properties of contents

- Jati patra: It is an aphrodisiac, sedative, antiseptic, analgesic.
- Neem Patra: An ingredient of high medicinal value used to treat leprosy, skin ulcers.
- Patola: It is useful for gastrointestinal and liver disorders.
- Karanjbeej: Efficient as quick relief for wound and inflammation.
- Mulethi: Best used for treatment ulcers, and bronchial conditions.
- Kuth: Aids in headache, Rheumatoid arthritis and balding.
- Haldi: An analgesic, antibacterial, anti-inflammatory, antiseptic, antispasmodic, appetizer.
- Daruharidra: Aids in reducing pain and inflammation.

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- Kutaki: It is useful in curing bleeding disorders like menorrhagia, nasal bleeding etc.
- Manjistha: Improves appetite and useful in treating bleeding ulcers, dyspepsia, parasitic worms, etc.
- Padmaka: Cures blood disorders such as abscess.
- Lodhra: Treats anaemia and bleeding disorders. It also improves strength and relieves gum bleeding.
- Harad: It relieves inflammation, cures skin disease.
- Nilofar: Useful in hemorrhages, menorrhagia, fever, strangury.
- Sariva: Improves sperm quality and quantity, also cures diarrhea and dysentery.

WHO GUIDELINES ON UMBILICAL CORD CARE^[5]

Umbilical cord care at birth and in postnatal period includes washing of hands with clean water and soap before delivery, newborn should laying on clean surface, washing the hands again before tying and cutting the umbilical cord, and cutting the umbilical cord with sterile instrument, keeping the umbilical cord dry and exposed to air or loosely covered with clothes (if custom demand binding of the abdomen a sanitary method such as the use of clean piece of gauze can be recommended), the umbilical cord should be washed when necessary with clean water and soap (cleaning with alcohol seems to delay healing), and the napkin should be folded below the umbilicus, following 24-hour rooming-in practices, skin-to-skin contact with mother at birth to promote colonization of the newborn with the non-pathogenic bacteria from the mother's skin flora.

4. OBJECTIVES

1) to evaluate the efficacy of *jatyadi taila* management of *nabhipaka* (umbilical sepsis).

CASE REPORT

Patient History

A seven days old female newborn child with tenderness and swelling over umbilical area with pus discharge visited the OPD of our ayurved medical college. The patient's mother reported that the pregnancy and child's hospital delivery was normal and not reported any gross congenital anomalies at the time of birth. The patient is on breast fed following her birth.

History: No history of injury, trauma.

Clinical observations

On examination

• Pulse: 144/ min

• Spo2-99%

• P/ A: soft- Non specific

Tongue: Slightly coated

Urine:passed

• Stool: passed

Local Examination: purulent discharge of pus.

Investigations: CBC- blood investigations were normal ruling out.

Diagnosis: Nabhipaka (Umbilical Sepsis).

5. TREATMENT

• On consultation^[3]

Jatyadi Taila

(2 times a day) for local application with gauze.

Advice

- ✓ Don't use soap.
- ✓ Maintain hygiene
- ✓ Recommend collaborative approach between child and mother.

• On 1st follow up

After 15 days Patient had resolved *nabhipaka*.

A complete improvement is seen after 15 days of treatment with complete cure of *nabhipaka* (umbilical sepsis) and good appetite.

MODE OF ACTION

The majority of *Jatyadi taila's* constituents contain *Tikta, Kashaya Rasas*, and *Laghu, Ruksha Gunas. Jatyadi Taila* is *Tikta* and *Kashaya Rasa Pradhana*, both of which are *Pitta Kapha hara* and have the properties of *Vrana Shodhana, Ropana, Pootihara*, and *Vedanasthapana*. *Jaati* contains salicylic acid, which has antibacterial, anti-inflammatory, and antifungal properties.

6. MATERIALS AND METHODS

The literary sources for the Present study was collected by ayurvedic *samhitas* like *Charaka Samhita, Sushruta Samhita, Astang Sangrah, Sharangdhar Samhita etc.* It will be correlated with the contemporary available books, literature, journals, websites, and research paper as per the need of the study.^[7,8]

7. DISCUSSION

Ayurveda *nabhi upakrama* covers the all guidelines mentioned by who umbilical cord care such as clean umbilical cord care practices, use of topical antimicrobial which is safe, cheap and acceptable by the communities and health workers. ayurveda antimicrobials medicated oils *jatyadi taila* mentioned in umbilical cord care have very useful in natural healing and to prevent the complications. ayurveda topical agents for the umbilical cord care are traditionally in used since long time and possess all the gold standards of ideal antimicrobial agents like - potent antimicrobial, anti-inflammatory, and wound healing properties. secondly there is no development of resistance to particular bacterial flora, therefore, these preparations are very useful for umbilical cord care" in addition ayurveda explained the complications during umbilical cord care and treatment of those complications too, therefore, today's health care system should promote the ayurveda umbilical cord care practices. therefore ayurveda *nabhi upakrama* (umbilical cord care) with *jatyadi taila* is useful to open new dimensions of umbilical cord care practices". [9,10,11]

8. CONCLUSION

Umbilical cord care is a key factor in the newborn care to reduce the mortality & morbidity globally. The detail care of umbilical cord is surely the precursor of recent neonatology. *Ayurved* & modern sciences, both having the common aim of protecting the newborn & adapting it to worldly environment. The antibacterial, anti-inflammatory, analgesic, and other benefits of the *Jatyadi taila* have been scientifically thus verified in present study.

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