



SUCCESSFUL MANAGEMENT OF NEONATAL UMBILICAL GRANULOMA WITH APAMARGA KASHARA KARMA – A CASE REPORT

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Abstract

Umbilical granuloma is the most common umbilical lesion encountered in neonates, resulting from excessive granulation tissue formation during the postnatal healing of the umbilical stump. In Ayurveda, this condition may be correlated with disorders such as Pindalika, a complication arising from improper management of the umbilical cord, and Nabhigata Arsha, characterized by abnormal tissue overgrowth at the umbilicus. 28 Days old neonate presented with a complaint of pinkish, moist swelling on umbilicus with discharge and occasional bleeding since birth. On examination a single swelling on umbilicus cherry red in colour with serous discharge was present. It was soft, non tender and moist. Under aseptic precautions Apamarga kshara (Alkaline preparation having Achyranthes aspera plant) was applied on umbilical granuloma. This procedure was repeated for next 2 days. At 7th day from 1st day of kshara application, it was completely healed. Umbilical granuloma was successfully treated with Kshara karma.

Keywords – Umbilical granuloma, Pindalika, Kshara karma, Nabhigataarsha

1. Introduction

Umbilical granuloma is the most common umbilical lesion encountered in neonates and young infants. It is characterized by the presence of friable granulation tissue at the base of the umbilicus following separation of the umbilical cord. The lesion typically develops within the first two weeks of life, during the process of umbilical stump detachment and closure of the umbilical ring. Incomplete epithelialization of the umbilical ring results in persistent granulation tissue proliferation, leading to the formation of an umbilical granuloma. (1, 2)

Untreated umbilical granulomas may predispose to secondary infection, resulting in severe complications such as omphalitis and necrotizing fasciitis. Evidence regarding the spontaneous regression of untreated granulomas remains limited.(3, 4)

Clinically, it appears as a pink, moist, friable tissue mass, occasionally associated with scant fibrinous discharge.(5)

The management of umbilical granuloma encompasses various modalities, including chemical cauterization using silver nitrate or copper sulfate, common salt therapy, electrocautery, cryotherapy, ligation, and surgical excision.(6) From an Ayurvedic perspective, the condition may be compared with Pindalika and Nabhigata Arsha.(7) Ayurvedic texts advocate Kshara Karma for such proliferative lesions because of its tissue-destructive and debriding actions, referred to as Ksharana. (8)

Figures

A. Before treatment



B. After treatment



2. Patient information

2.1 Chief complaints

An 28 days old male neonate presented on OPD of Department of Kaumarbhritya, With a complaint of reddish swelling on umbilicus with discharge and occasional bleeding from umbilicus.

2.2 History of present and past illness

According to parents of the child the swelling was consistently present and no known relieving factors. He had no other past and associated illness.

2.3 Treatment history

The patient had visited nearby government hospital where it was diagnosed as umbilical granuloma. According to mother of the patient, he was prescribed with an ointment, which was applied for the patient but did not show any improvement.

2.4 Personal and birth history

The patient had normal vaginal delivery, cried immediately after birth. No any obvious congenital anomaly seen. The neonate is feeding adequately and has normal bowel and bladder habit with regular passage of stool and urine.

3. Clinical Finding

A single swelling was present measuring 0.8 x 0.8 x 0.5cm on umbilicus, which had cherry red in colour with serous discharge. It was soft, non tender and moist.

4. Timeline

Day 1. The patient was brought to OPD. After diagnosis and consent from parent treatment was begun. First application of Kshara was done.

Day 2. Kshara application was done on the second day.

Day 3. Kshara application was done. Patient was discharged from hospital

Day 7. Patient had follow up visit to OPD and had no signs and symptoms of umbilical granuloma.

5. Diagnostic assessment

Routine blood and urine investigations were within normal range.

Ultrasonography – No sonological abnormality was noted.

5.1 Based on the history and clinical presentation the case was diagnosed as umbilical granuloma

6. Therapeutic intervention

The patient was managed using an Ayurvedic treatment approach. Under strict aseptic precautions, chemical cauterization (Kshara Karma) was performed using Apamarga Kshara, an alkaline formulation prepared from *Achyranthes aspera*. The lesion was first cleansed with povidone-iodine solution, following which Kshara was carefully applied and retained for approximately two minutes. Subsequently, the area was irrigated with normal saline to neutralize and remove the applied agent. The procedure was repeated on two consecutive days. Following completion of the treatment course, the patient was discharged and advised to return for follow-up evaluation after seven days.

7. Follow up and outcomes

Following the initial application of Kshara, no significant reduction in the size of the lesion was observed; however, the lesion exhibited a color change from cherry red to blackish-brown. A mild burning sensation was reported after the procedure, which subsided following irrigation with normal saline.

By the third day, a marked reduction in lesion size was evident, accompanied by complete cessation of discharge. Mild transient burning was again reported after Kshara application and was effectively relieved with normal saline washing.

At the seven-day follow-up, complete resolution of the granulomatous tissue was observed, with the surrounding skin appearing dry and healthy.

Throughout the treatment period, no antibiotics or analgesics were administered, and no adverse effects or complications were reported.

8. Discussion

Umbilical granuloma is a common neonatal condition, typically managed on an outpatient basis. This case was unusual as it persisted until age eight and did not respond to conventional ointments. In Ayurveda, such growths are classified as Arsha, and Kshara karma is indicated. Kshara, due to its alkalinity, cauterizes the swelling, coagulates proteins, and induces aseptic fibrosis, leading to resolution (8) Its Chedana, Lekhana, and Bhedana properties help slough off the unwanted tissue (9)

9. Conclusion

Kshara Karma demonstrated satisfactory clinical outcomes in the management of umbilical granuloma, leading to complete healing without complications or recurrence. Its simplicity, cost-effectiveness, and minimally invasive nature make it a promising alternative treatment modality. Further clinical studies are warranted to validate its efficacy and safety in larger populations.

10. Informed consent

The guardians were informed about the disease and Ayurvedic treatment. They provided consent for the treatment procedure.

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None

Conflict of interest

None

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