

## A Dash of Common Salt for Umbilical Granuloma

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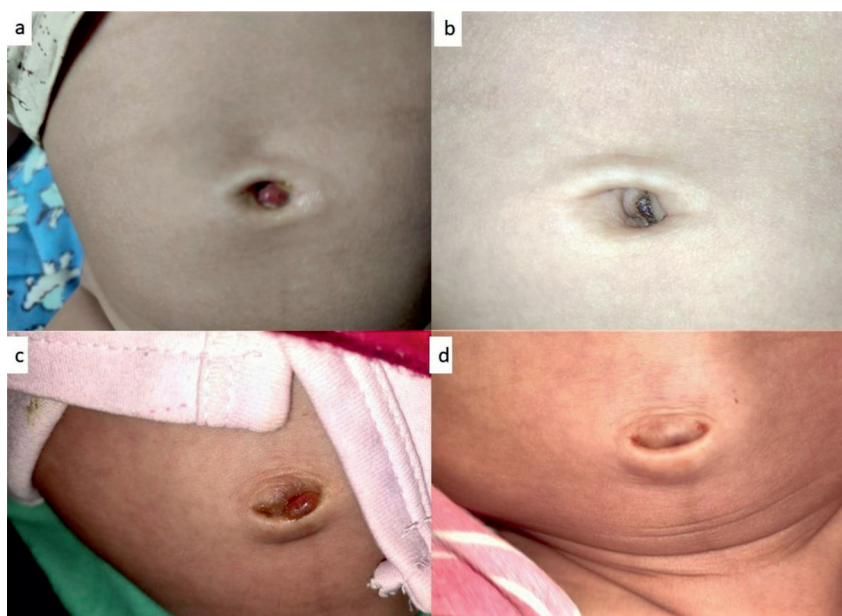
### CASE 1

A four-week-old male baby was brought by his mother to the outpatient department with complaints of a small reddish pea-sized swelling at the umbilicus noticed after the umbilical cord had fallen off at two weeks of age (**Fig. 1a**). The mother also noticed a scanty, clear and odorless discharge at the site. The surrounding skin was, however, healthy. A possible diagnosis of umbilical granuloma was made. Due to non-availability of silver nitrate stick, a pinch of common salt was sprinkled over the umbilical swelling and covered with a damp gauze for 15 minutes, followed by thorough cleaning of the site. After the first application of salt, the swelling shrunk and became black. The salt pack was repeated the next day, and following it the swelling shriveled and fell off. By the fourth day, the umbilicus was free of any discharge and appeared healthy (**Fig. 1b**).

### CASE 2

A two-month-old baby girl was brought by her mother with complaints of a pinkish swelling at the umbilicus noticed since the age of 3 weeks after separation of the umbilical cord. There was associated oozing of some clear and odorless discharge from the swelling (**Fig. 1c**). Considering a possibility of umbilical granuloma, application of silver nitrate was advised to cauterize the lesion. However, due to non-availability of the same, a pack of common salt was applied for 15 minutes. The salt pack was repeated the next day following which the granuloma became black and decreased in size. On the third day, the umbilicus was healthy and clear of any oozing (**Fig. 1d**).

In both the cases, there was complete resolution of granuloma with salt treatment in 2-3 days with no adverse effects and no recurrence was seen at 3 months follow up.



**FIG. 1a.** A reddish pea-sized umbilical granuloma seen after the cord fell off in case 1, **1b.** Healthy umbilicus following application of salt pack in case 1, **1c.** Umbilical granuloma seen in case 2, **1d.** Healthy umbilicus seen following local application of common salt in case 2.

## KEY LEARNING POINT

- Application of common salt pack is an easily available, cheap, rapid, safe and effective treatment option for umbilical granuloma.

## DISCUSSION

Umbilical granuloma is the most common umbilical mass observed in the infants and neonates.<sup>1</sup> It is likely due to the overgrowth of umbilical tissue or excessive inflammation of the umbilical cord following improper cutting of the cord after birth.<sup>2,3</sup> It may present as a protuberant red swelling or with serous or bloody discharge from the umbilicus.

Since umbilical granulomas do not resolve spontaneously, it is imperative to treat them to prevent complications like persistent discharge, omphalitis or bleeding. Conventionally, umbilical granulomas are treated with chemical cauterization using topical silver nitrate or copper sulfate to cauterize the granuloma.<sup>4,5</sup> Alternative non-invasive treatments include topical steroids like clobetasol propionate or ethanol swabs.<sup>6,7</sup> Surgical electro-cauterization, cryocauterization and surgical excision are other invasive modalities for managing umbilical granulomas, although used uncommonly. The use of topical silver nitrate and copper sulfate is not cheap, entails the risk of chemical burns and these may not be readily available. Although topical application of steroids can be done easily, it requires daily application for a prolonged period of 4-6 weeks and their use is fraught with complications like local infection. Use of ethanol swabs for treating umbilical granulomas have not had very successful outcomes.

A simple home remedy like application of “common salt” on the lesion can be a cheap and effective alternative solution. The efficacy of salt is explained by its dehydrating action by virtue of its hyperosmolarity. However, prior evaluation of the lesion by a qualified doctor to rule out mimickers of umbilical granuloma like umbilical polyp, umbilical adenoma or urachal anomalies should be done.<sup>8</sup> The successful treatment of umbilical granuloma with common salt was reported first in 1971,<sup>9</sup> and subsequently by several authors who reported complete resolution of umbilical granuloma with common salt application with no adverse effects or recurrence on subsequent follow-up.<sup>10-13</sup>

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