Umbilical Granuloma

Clinical Guideline

Urgent Care

Is concern an umbilical granuloma?

Newborn within first few weeks of life and after cord separation presents with:

- Soft, wet, pink to red in color, pedunculated anomaly that is “mushroom-like or “cherry-like” in appearance
- Size: 3-10 mm in diameter or length
- May secrete a serous or serosanguinous drainage
- Not present at birth

No → Consider alternative diagnoses (annotation B)

Yes

Which location will the patient be treated?

In clinic:

Topical 75% Silver Nitrate is the traditional **first-line therapy** for umbilical granulomas
(see Annotation C for application instructions)

Or

At home:

- **Common salt home-made remedy** (See Annotation D for instructions)

Or

- **Topical clobetasol propionate (0.05%)** an alternative treatment to silver nitrate (See Annotation D for instructions)

Provide Family Education

- Keep treated area dry/avoid bathing infant for 24 hours after applying any of the above treatments.
- Monitor size and appearance of umbilical granuloma daily.
- Follow up with PMD in 3-5 days if treatment is not successful, surrounding skin is open, red or very inflamed, or peeling/draining.

Family Education re: Silver Nitrate

- Skin that comes in contact with silver nitrate may be temporarily stained darker, this will resolve over about a week.
- Rarely, silver nitrate may cause the skin around the umbilicus to be irritated. This will heal.

Family Education re: Clobetasol propionate (0.05%)

- Do not use for more than 2 weeks
- Do not use more than 50 g weekly

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A. **Definition:** Umbilical granulomas are the most common cause of an umbilical anomaly. They are not present at birth and first develop during the first few weeks of life after cord separation (cord separation usually occurs one week after birth).

B. **Etiology:** Umbilical granulomas develop when granulation tissue at the base of the umbilicus persists and overgrows. It occurs due to incomplete re-epithelialization over the fibromuscular ring of the umbilicus after cord separation. The area contains no nerves and therefore does not have sensation.

C. **Differential Diagnosis:** Many umbilical anomalies in neonates are umbilical granulomas, which appear as moist, pink granulation tissue, and umbilical hernias, which present as smooth, reducible masses that are covered with normal appearing skin. Infrequent causes of umbilical anomalies include:

- Umbilical polyp
  - Umbilical polyps are composed of intestinal epithelium or uroepithelium. They are much less common than umbilical granulomas, and tend to be larger, firm, and do not respond to silver nitrate therapy. They require surgical excision.
- Patent omphalomesenteric duct
  - Persistent connection to ileum that fails to involute during development, leads to drainage from umbilicus, infants appear to have a stoma in the umbilicus after cord separation. These infants typically have persistent umbilical drainage rather than a true mass or other anomaly.
- Patent urachus
  - Persistent connection to bladder that fails to involute during development, presents with urinary drainage from umbilicus. These infants typically have persistent umbilical drainage rather than a true mass or other anomaly.
- Ectopic tissue (very rare—pancreatic or liver)

Guideline

Objective Data/Physical Exam

- Soft, wet, pink to red in color, pedunculated anomaly that is “mushroom-like or “cherry-like” in appearance
- Size: 3-10 mm in diameter or length
- May secrete a serous or serosanguinous drainage

Diagnostic Studies - none indicated

Treatment

- In clinic option: Topical 75% Silver Nitrate is the traditional first-line therapy for umbilical granulomas (Meltzer, 2005)
  - Wear gloves to protect skin from contact with silver nitrate when applying.
  - Apply petroleum jelly onto the healthy skin surrounding the granuloma to prevent chemical burn from the silver nitrate.
  - The silver nitrate stick is activated by contact with moisture. Roll the tip of the stick gently over the moist granulation tissue, avoid applying to healthy skin. One stick is typically enough for each application. The treated tissue may turn gray or white in color or shrink slightly with treatment.
  - If silver nitrate comes in contact with healthy skin, immediately apply saline solution (which will deactivate the silver nitrate), and then rinse with water.
  - Silver nitrate can stain surrounding skin and clothing, use care during application and communicate this to family.
  - This procedure may need to be repeated once to twice weekly, generally only a few applications are needed for successful treatment. (Nagar, 2001)
  - Used silver nitrate sticks must be disposed of in proper hazardous waste bin provided at each clinical location.
- At home option: common salt is a safe, effective and cheap home-made remedy (Banerjee A, 2023; Borkar N, 2025)
  - First, clean the area well.
  - Apply of a pinch of common table salt (enough to cover granuloma area), 1-2 times a day for 3-5 days (Bagadia J, 2019)
  - Cover the site with a band-aide or non-adherent gauze and tape for 24 hours.
  - In 24 hours, remove cover and check area, repeat until granuloma is resolved.
  - If granuloma is not resolving, follow-up with primary pediatrician.
- Alternative option: Topical clobetasol propionate (0.05%) is safe, effective and an alternative treatment to silver nitrate. (Brodsgaard, 2015)
  - Apply over the area of the granuloma 1-2 times daily for no more than 2 weeks duration.
  - Do not exceed 50 g per week of use. (Iijima, 2023)
  - Of note, this is not FDA-approved in children under the age of 12, though clinical studies have used it safely for short durations in neonates with umbilical granulomas.
- For cases that fail to respond to the above topical options, PCP may consider ligation vs referral to pediatric surgery for excision. (Lotan, 2002) Lesions that require excision are typically sent for histopathology to evaluate for presence of umbilical polyp.

Education of Patient/Family

- General education:
  - Keep treated area dry/avoid bathing infant for 24 hours after applying any of the above treatments.
  - Monitor size and appearance of umbilical granuloma daily.
  - Follow up with PMD if treatment is not successful, surrounding skin is open, red or very inflamed, or peeling/draining.
- Provide CW Urgent Care AVS, consider CW Teaching Sheet. Silver nitrate specific education:
  - Skin that comes in contact with silver nitrate may be temporarily stained darker, this will resolve over about a week. Rarely, silver nitrate may cause the skin around the umbilicus to be irritated. This will heal.
- Clobetasol propionate specific education:
  - Do not use for more than 2 weeks
  - Do not use more than 50 g weekly

Follow-up

- Recheck by PMD in 3-5 days.
  - For treatment failure, PMD may consider referral for:
    - Evaluation for other possible causes of umbilical anomaly
    - Performance of other non-conservative treatments

References

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Treatment information and review also provided by Lynn Calaway, PA, Surgery, Children's Wisconsin, (personal communication, January, 2022) and Chris Schwake, MD, Children's Medical Group (personal communication, November, 2025).

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Please contact clinicalguidelines@childrenswi.org for questions or comments.

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Medical Disclaimer

This Clinical Guideline (CG) is designed to provide a framework for evaluation and treatment. It is not intended to establish a protocol for all patients with this condition, nor is it intended to replace a clinician's judgement. Adherence to this CG is voluntary. Decisions to adopt recommendations from this CG must be made by the clinician in light of available resources and the individual circumstances of the patient. Medicine is a dynamic science; as research and clinical experience enhance and inform the practice of medicine, changes in treatment protocols and drug therapies are required. The authors have checked with sources believed to be reliable in their effort to provide information that is complete and generally in accord with standards accepted at the time of publication. However, because of the possibility of human error and changes in medical science, neither the authors nor Children's Hospital and Health System, Inc., nor any other party involved in the preparation of this work warrant that the information contained in this work is in every respect accurate or complete, and they are not responsible for any errors in, omissions from, or results obtained from the use of this information.