

A Female Newborn with a Perineal Groove

Jacinta Mendes, Luísa Preto, Anabela Bicho, Sara Diogo Santos

Port J Pediatr 2020;51:284-5

DOI: <https://doi.org/10.25754/pjp.2020.19355>

A full-term female neonate was born by spontaneous vaginal delivery with an Apgar score of 9/10 and a birthweight of 2.690 kg. The pregnancy was uneventful, and the maternal laboratory studies and fetal ultrasounds were described as normal. On physical examination, a perineal anomaly was detected. Instead of a normal midline perineal raphe, she had a longitudinal red, moist cleft extending from the vaginal posterior fourchette to the anterior margin of the anus. The anus was properly positioned, and the remaining physical examination was normal. The clinical diagnosis of a congenital complete perineal groove was established.

Perineal groove is a rare congenital anomaly with unclear incidence,^{1,3} and it is more frequently described in female neonates with two affected males in 37 reported cases.^{1,3-5} It is characterized by a wet erythematous sulcus of nonkeratinized mucosa, and it is categorized in two types¹⁻⁵:

- The complete perineal groove, extending from the vagina to the anus;
- The incomplete perineal groove, ending in the middle of the perineum.

The perineal groove pathogenesis remains unclear.¹⁻⁵ Hypotheses consider a poorly understood genetic change or an embryological developmental anomaly of uroanal or urorectal septum, cloacal duct, or perineal raphe.^{1,3-5} Although most cases are isolated, it may be associated with other urogenital and anorectal anomalies.²⁻⁵

This condition usually epithelializes spontaneously in the first two years of life. The diagnosis is based on the clinical examination, routine imaging is not usually recommended, and conservative treatment is preferred.⁵ Unless there are complications, such as infection or persistent mucus drainage, or for cosmetic reasons, it requires no surgical treatment or further interventions.¹⁻⁵ At the age of 2 months, the baby girl has her perineal groove partially epithelialized and no associated complications.

The perineal groove can be misdiagnosed as contact dermatitis, trauma, or even sexual abuse.¹⁻⁵ A correct

diagnosis is important for providing appropriate parental counseling, proper follow-up, and avoidance of unnecessary surgical and medical interventions.^{1,3,5}

Keywords: Congenital Abnormalities; Infant, Newborn; Perineum/abnormalities



Figure 1. Newborn with congenital complete perineal groove.



Figure 2. At two months and 10 days follow-up, the congenital perineal groove is partially epithelialized.

Caldas da Rainha Pediatrics Department, West Hospital Center, Caldas da Rainha, Portugal

Corresponding Author

Jacinta Mendes

<https://orcid.org/0000-0003-0804-7519>

jacintamendes@gmail.com

Casa Rodrigo Berquó, R. Diário de Notícias, 2500-176 Caldas da Rainha, Portugal

Received: 11/02/2020 | Accepted: 12/05/2020 | Published: 02/10/2020

© Author(s) (or their employer(s)) and Portuguese Journal of Pediatrics 2020. Re-use permitted under CC BY-NC. No commercial re-use.

WHAT THIS REPORT ADDS

- Perineal groove is an uncommon congenital anomaly of the perineum.
- Usually, the congenital perineal groove heals spontaneously in the first two years of life, so no interventions are necessary unless there are complications.
- Knowledge of this condition should help prevent misdiagnosis and erroneous management.

Conflicts of Interest

The authors declare that there were no conflicts of interest in conducting this work.

Funding Sources

There were no external funding sources for the realization of this paper.

Provenance and peer review

Not commissioned; externally peer reviewed

Consent for publication

Consent for publication was obtained.

Confidentiality of data

The authors declare that they have followed the protocols of their work centre on the publication of patient data.

References

1. Mulla Cheng H, Wang Z, Zhao Q, Zhu H and Xu T. Perineal groove: Report of two cases and review of the literature. *Front Pediatr* 2018;6:227. doi: 10.3389/fped.2018.00227.
2. IlnK, Na Y, Ho IG, Oh JT. Clinical characteristics and conservative treatment of perineal groove. *J Pediatr Surg* 2019;S0022-3468:30505-6. doi: 10.1016/j.jpedsurg.2019.07.017.
3. Garcia-Palacios M, Mendez-Gallart R, Cortizo-Vazquez J, Rodriguez-Barca P, Estevez-Martinez E, Bautista-Casasnovas A.

Perineal groove in female infants: A case series and literature review. *Pediatr Dermatol* 2017;34:677-80. doi: 10.1111/pde.13311.

4. Hunt L, Srinivas G. Newborn with a perineal lesion. *Pediatr Rev* 2016;37:e1-3. doi:10.1542/pir.2015-0043.

5. Eskandar-Afshari F, Danzer E, Lee HC, Ragavan N. A neonate with a perineal lesion. *Neoreviews* 2019;20:e680-2. doi: 10.1542/neo.20-11-e680.