

IMAGE CASES

Congenital Perineal Groove: A rare but benign condition

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A female newborn (gestational age 40 weeks) with an unremarkable prenatal history presented at birth with a linear, erythematous, moist groove located along the midline of the perineum, extending from the vaginal fourchette to the anterior margin of the anus (**Figure 1**). The lesion was non-painful and non-hemorrhagic, with no signs of inflammation or infection. The urethral, vaginal, and anal openings were normally positioned, and the remainder of the physical examination was normal. The infant has been under clinical follow-up with no complications to date.

What is your diagnosis?



Figure 1 - Congenital perineal groove

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DIAGNOSIS

Congenital perineal groove.

DISCUSSION

Perineal groove is a rare, likely underrecognized congenital malformation, occurring almost exclusively in females.⁽¹⁻³⁾ It is characterized by a non-epithelialized mucosal sulcus replacing the normal perineal raphe.⁽¹⁻³⁾ Its etiology remains uncertain, with proposed mechanisms including abnormal development of the urorectal septum, persistence of a cloacal duct remnant, or incomplete fusion of the perineal raphe.⁽¹⁻³⁾

Diagnosis is clinical, and the condition is generally benign and self-limiting, with spontaneous epithelialization during the first two years of life, although later resolution has been reported.^(2,3) Conservative management is therefore recommended in asymptomatic cases. Early recognition is essential to avoid misdiagnosis, such as trauma or even sexual abuse, and unnecessary investigations or interventions.⁽¹⁻³⁾

ABSTRACT

Congenital perineal groove is a rare and likely underrecognized congenital malformation occurring almost exclusively in females. It presents as a non-epithelialized mucosal sulcus located along the midline of the perineum, extending from the posterior vaginal fourchette to the anterior margin of the anus. Diagnosis is clinical, and the condition is generally benign and self-limiting, with spontaneous epithelialization during early childhood. Early recognition is essential to avoid misdiagnosis and unnecessary investigations or interventions.

Keywords: clinical image; congenital anomaly; newborn; perineal groove

AUTHORSHIP

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REFERENCES

1. Barbosa M, Alves N, Fontes N. Perineal groove: a rare congenital anomaly. *Acta Med Port.* 2016;29:670-672.
2. Park S, Kim D, Oh JY, Lee J. Perineal groove: a case report

and review of the literature. *Perinatology.* 2022;33:213-217.

3. Naji H, Ali Hassan R. Perineal groove: is it more common than we think? *Pediatr Rep.* 2021;13:490-494.

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