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# Perineal groove: A rare congenital malformation

Images



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A 40 + 3-week-old female newborn weighing 2910 g was delivered by cesarean section (CS) due to a previous CS. Apgar score was 9 and 10 at 1 min and 5 min, respectively. Pregnancy history was unremarkable. All prenatal tests were negative, and there was no family history of congenital malformations. During the first physical examination, a perineal lesion characterized by an erythematous midline sulcus with a mucous membrane was noticed, extending from the posterior vaginal fourchette to the anterior anal margin. The lesion was neither painful nor hemorrhagic, and no other abnormalities were found. Vulvar vestibule was normal, and the urethra, vagina, and anus were in their correct positions. This appearance is consistent with a specific perineal malformation called perineal groove (Fig. 1).

Perineal groove is a rare congenital malformation of the perineal raphe that typically affects the female sex (only two cases have been described in males). Its incidence and etiopathogenesis are still unknown. In most cases, it presents as an isolated malformation, although it can rarely be accompanied by other abnormalities.<sup>1</sup> In male infants, perineal groove has been associated with hypospadias and bifid scrotum, while in female infants, one case of vestibular fistula and one case of anterior anus have been reported.<sup>2</sup> Perineal groove is generally asymptomatic, and its diagnosis is exclusively clinical. Further evaluations, such



Figure 1 Perineal groove.

as abdominal ultrasound, should be performed when other clinical manifestations (such as urinary tract infections and constipation) and abnormalities are present, which might suggest a possible renal or intestinal malformation.

The lesion tends to resolve spontaneously within two years of life without any medical or surgical intervention.<sup>3</sup> A surgical approach can be required for cosmetic reasons, if

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epithelization fails to occur within two years, or in case of complications such as those described above. A precocious diagnosis is useful to prevent unnecessary investigations and treatments, as well as to avoid misdiagnoses, especially sexual abuse. The key differences with the latter include the absence of local bleeding or granulation tissue in the perineal area, presence of an intact annular hymen and a normal anal sphincter, and absence of pain and crying when the perineum is examined.<sup>4</sup>

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### Informed consent

Oral and written consent informed consent was obtained from the patient's parents.

#### Declaration of competing interest

All the authors declare that they don't have any conflict of interest.

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