

## CASE IMAGE

## Intriguing mass associated with cleft palate

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**Abstract**

Nasopharyngeal teratomas are rare and represent only 2% of all teratomas. They can lead to an embryopathogenic mechanical obstacle responsible for a cleft palate with few reported cases of this association in the literature. We report the case of a 14-month-old girl with this atypical association.

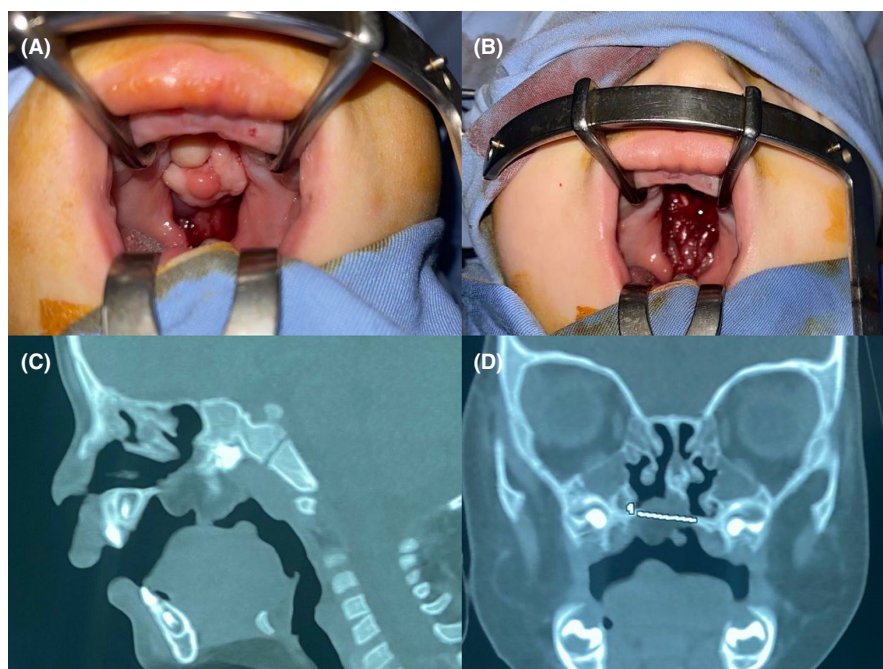
**KEYWORDS**

dentistry, ear, nose and throat, obstetrics and gynecology, pediatrics and adolescent medicine, respiratory medicine

Teratoma is a tumor representing differentiation from all embryonic germ layers, ectoderm, mesoderm, and endoderm.<sup>1</sup>

Nasopharyngeal teratoma (NPT) can extend to the sphenoidal, endobuccal, and pharyngeal regions. The most common associated abnormality is cleft palate (CP).<sup>2</sup>

A 14-month-old newborn girl was referred to our department for CP. Oral examination revealed a firm mass of 1 × 1.5 cm, appended to the ethmoid (Figure 1A). A head computed tomography scan revealed a well-delimited tumor with calcifications and fat tissue, expanding to the sphenoid (Figure 1C,D).



**FIGURE 1** (A) Firm and polylobed mass with cleft palate (CP) in a 14-month-old girl, (B) post-operative photography, (C) pre-operative head CT scan of nasopharyngeal teratoma (NPT) appended to the vomer bone and the sphenoid (sagittal view), (D) pre-operative head CT scan showing the tumor and the CP (coronal view, bone window).

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Tumor excision was performed immediately (Figure 1B). Histologically, the tumor was a true teratoma according to the Wittstock et al. classification.<sup>2</sup> The reconstruction of the velar and the palatal defect was performed 6 months later to ensure a complete excision. No recurrence of the mass has been observed during 2 years of follow-up.

The hypothesis of mechanical origin of the association of NPT and CP is the most plausible. In fact, when located centrally in the oro-nasal region, NPT is likely to be an obstacle for fusion of the palatal shelves during the development of the mammalian palate. This anomaly is likely to lead to a cleft of the palate which will require repair after tumor excision.

#### AUTHOR CONTRIBUTIONS

All the authors contributed to the writing of the manuscript.

#### ACKNOWLEDGMENT

None.

#### CONFLICT OF INTEREST

None.

#### DATA AVAILABILITY STATEMENT

Data sharing is not applicable as no new data are generated.

#### CONSENT

Written informed consent was obtained from the patient's legal guardian to publish this report in accordance with the journal's patient consent policy.

#### REFERENCES

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**How to cite this article:** Daldoul M, Tritar S, Ayachi S, Moatemri R, Kochtali H. Intriguing mass associated with cleft palate. *Clin Case Rep.* 2022;10:e06134. doi: [10.1002/ccr3.6134](https://doi.org/10.1002/ccr3.6134)