

Lottery Ticket with 1-in-40,000,000+ Odds?: Pediatric Lobular Capillary Hemangioma with History of Nasal Dermoid Cysts

Robert Pearce Hyatt, B.S., Nuwan Tharanga Meegalla, MD, Joseph Sinnwell, MD,
Department of Otolaryngology, Wake Forest University School of Medicine

CASE REPORT

A 7-year-old boy presents to pediatric otolaryngology clinic with a nasal cavity mass of unknown etiology. Notably, this patient has a history of a dermoid along the nasal dorsum. This dermoid was surgically excised multiple times, after the 3rd excision there were no signs of external recurrence. The patient presented recently complaining of an intranasal mass. This was notably a new mass not present at birth and has increased in size over several years leading to intermittent epistaxis and nasal obstruction. Computed tomography (CT) imaging was obtained and the patient was taken to the operating room for nasal endoscopy and excision of the intranasal mass and small cuff of underlying mucosa. Final pathology confirmed the mass as a lobular capillary hemangioma, also referred to as a pyogenic granuloma. This is a benign pathology characterized as a small vessel tumor with varying degrees of inflammation or ulceration.

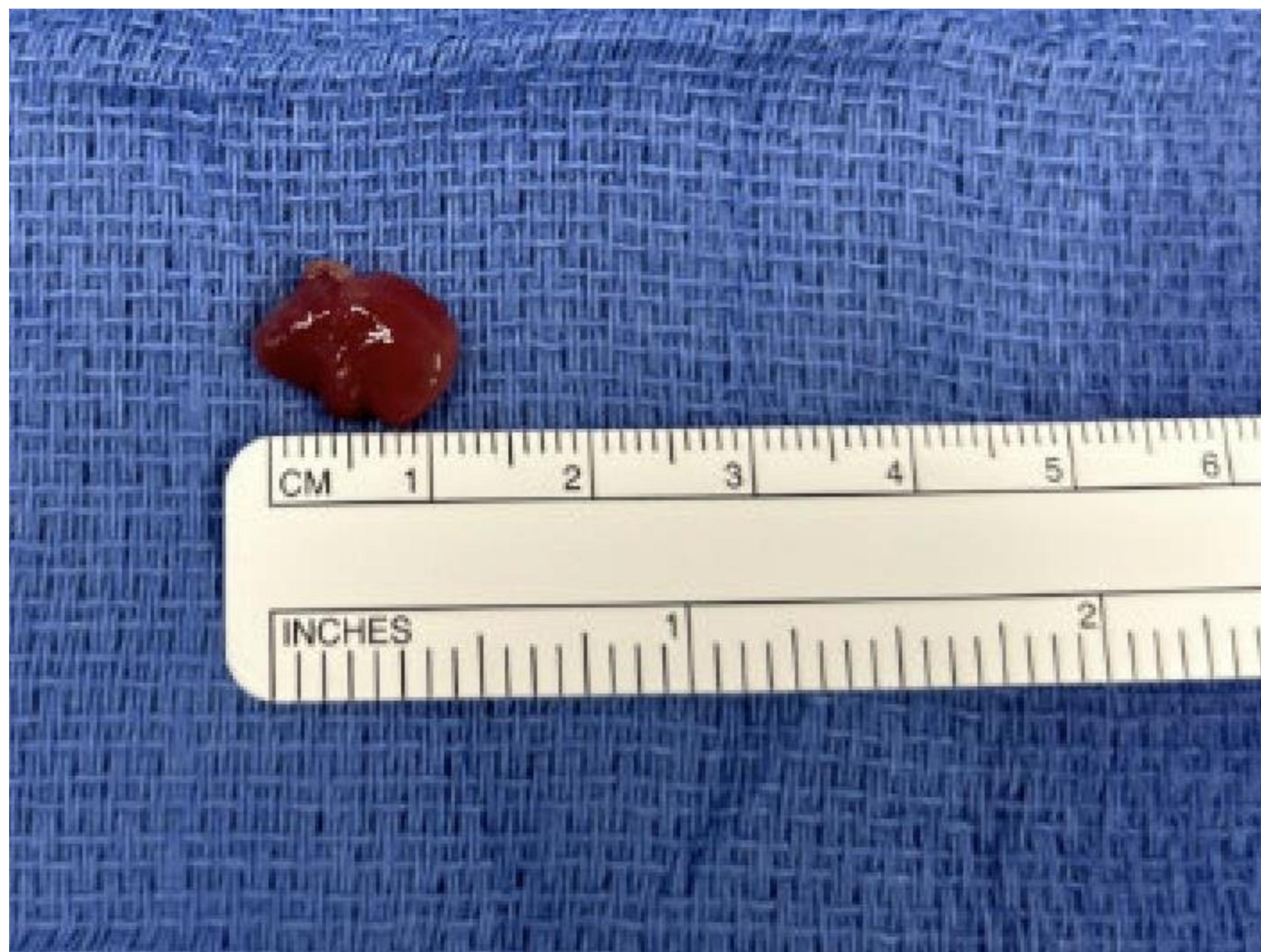


Figure 1. Patient's removed mass.

DISCUSSION

This child's combination of lobular capillary hemangioma with a history of nasal dermoids, presents as a rare finding. According to the Journal of Oral and Maxillofacial Surgery, nasal dermoid cysts affect 1 in 20,000 live births. Researchers at the Department of Dermatology and Pathology at University of Indiana School of Medicine estimate the rates of lobular capillary hemangioma to be 0.5% of mucocutaneous lesions in children, with about 1% of those occurring intranasally. A review of the literature suggests that this case is the first published instance of a patient having both a lobular capillary hemangioma and history of nasal dermoid.

CONCLUSIONS

This patient benefited from the mass being in an easily visible location, but patients with similar masses higher or deeper in the nose could go undiagnosed. Understanding that this rare combination of symptoms can present in one patient may allow future pediatricians to identify problems earlier and refer them to the appropriate specialist. If intranasal lobular capillary hemangiomas are not correctly identified and treated, young patients may have continued issues relating to nasal symptoms including nasal obstruction during the day and while sleeping, and refractory epistaxis. With support from an otolaryngologist, these kinds of granulomas can be easily removed without complications and low risk of recurrence.

ACKNOWLEDGEMENTS

The Author would like to thank Joseph Sinnwell MD and Nuwan Tharanga Meegalla MD for performing the surgery and their help and support with this project.

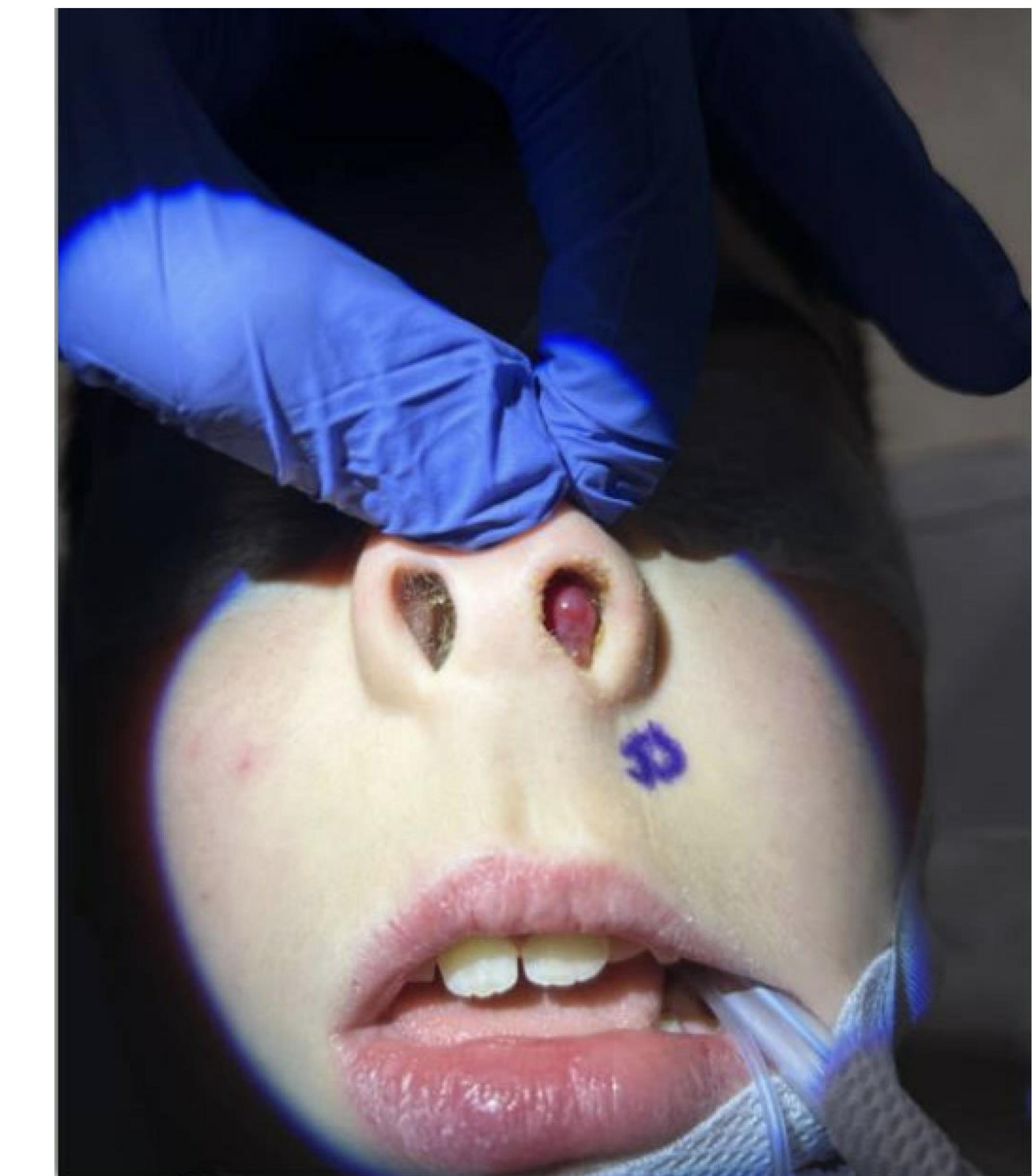


Figure 2. Patient's mass within nose

REFERENCES

- Alotaibi, Jood K, Osama Ali Alotayf, Mohammed Jihad Almahdi, and Mohammed Halwani. "Pediatric Intranasal Lobular Capillary Hemangioma: A Case Report and Review of the Literature." *Journal of Surgical Case Reports* 2024, no. 4 (April 1, 2024): rjae119. <https://doi.org/10.1093/jscr/rjae119>.
- Harris, M. N., R. Desai, T-Y Chuang, A. F. Hood, and G. W. Mirowski. "Lobular Capillary Hemangiomas: An Epidemiologic Report, with Emphasis on Cutaneous Lesions." *Journal of the American Academy of Dermatology* 42, no. 6 (June 1, 2000): 1012–16. <https://doi.org/10.1016/j.jaad.2000.104520>.
- Kohan, Joshua, Shayen McGee, Quinn Self, Thomas Ahern, Denise Hersey, Donna O'Malley, and Erin Ostby. "Operative Approaches for Midline Nasal Dermoid Cysts: A Systematic Review and Meta-Analysis." *Journal of Oral and Maxillofacial Surgery* 80, no. 9 (September 1, 2022): S5–6. <https://doi.org/10.1016/j.joms.2022.07.013>.
- Koo, Mun Geun, Soo Hyang Lee, and Soo Han. "Pyogenic Granuloma: A Retrospective Analysis of Cases Treated Over a 10-Year." *Archives of Craniofacial Surgery* 18, no. 1 (March 2017): 16–20. <https://doi.org/10.7181/acs.2017.18.1.16>.
- Lopez, Alexis, Shan Tang, Ashutosh Kacker, and Theresa Scognamiglio. "Demographics and Etiologic Factors of Nasal Pyogenic Granuloma." *International Forum of Allergy & Rhinology* 6, no. 10 (October 2016): 1094–97. <https://doi.org/10.1002/arr.21781>.
- Sarwal, Parul, and Kamolyut Lapumnuaypol. "Pyogenic Granuloma." In *StatPearls. Treasure Island (FL): StatPearls Publishing*, 2025. <http://www.ncbi.nlm.nih.gov/books/NBK556077/>.