Case Report

DOI: https://dx.doi.org/10.18203/issn.2454-2156.IntJSciRep20231100

Parotid salivary gland haemangioma in paediatric patient: surgical option

Pankaj Goyal*, Kishan Kumawat

Department of ENT and Head-Neck, Apollo E.N.T. Hospital, Jodhpur, Rajasthan, India

Received: 30 January 2023 Revised: 19 March 2023 Accepted: 20 March 2023

*Correspondence: Dr. Pankaj Goyal,

E-mail: pank1414@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

One of the most prevalent childhood benign tumour is haemangioma. They are frequently treated cautiously, taking many years for spontaneous involution. There has not been any information on youngsters with massive, deforming haemangiomas of the parotid gland and the cheek that overlie them. Young children who have parotid haemangiomas surgically removed will see an aesthetic improvement with minimal side effects. These disfiguring lesions should be treated with early excision performed by a qualified surgeon. Here, we offer a case report of a six-month-old kid with a parotid haemangioma who had surgical excision as a result of the tumour not responding to medication.

Keywords: Parotid salivary gland, Paediatric, Haemangioma, Surgery, Excision

INTRODUCTION

Haemangiomas are among the most prevalent juvenile neoplasms. They are frequently managed conservatively, necessitating years of spontaneous involution. Children with massive, disfiguring haemangiomas of the parotid gland and overlying cheek have not been found to be responsive to medical therapy. Involution can take many years and may eventually leave residual stigmata. Usually, a physical examination reveals parotid haemangiomas.¹

Due to its low cost and non-invasive nature, ultrasonography may be suitable for the initial examination of paediatric salivary gland lesions.^{2,3}

A deforming haemangioma of the parotid gland and the underlying cheek in a youngster has not yet been successfully treated medically, which is unfortunate. Young children who have parotid haemangiomas surgically removed will see an aesthetic improvement with minimal side effects. These disfiguring lesions should be treated with early excision performed by a qualified surgeon.

CASE REPORT

A six-month-old baby who had a painless left cheek swelling since birth presented to our Apollo E.N.T. Hospital. When steroids were administered, it was initially suggested that the swelling would go away with time. However, the swelling did not go away and continued to grow. A 4×4 cm soft cystic swelling in the left side of the parotid region was discovered during an examination. It was mobile, fluctuant, and non-tender. The swelling of the skin was normal and pinchable. There were no scars, sinuses, or dilated veins to speak of. He underwent ultrasonography, which revealed a 4×3 cm hypoechoic cyst-like lesion in the left parotid gland. Parents were concerned about this issue, so they decided on surgical excision. The nature of salivary gland mass was explained to the parents. Following proper consent, the patient was admitted for surgical excision under general anaesthesia. Modified Blair's incision was taken and the superficial Musculo-aponeurotic flap was elevated. The swelling was discovered intraoperatively in the parotid gland's superficial lobe. It was removed while keeping all of the facial nerve's branches intact. Following haemostasis, vicryl sutures were used to close the surgical incision.

Patient was shifted to recovery room. According to the histology report, it was a capillary haemangioma. During his one-year follow-up, the patient is doing well.

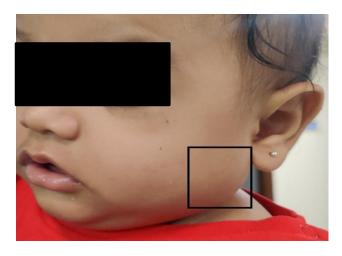


Figure 1: Clinical picture showing left sided parotid swelling.



Figure 2: Clinical photograph of left sided parotid swelling with marking of incision (modified Blair's incision).



Figure 3: Intra-operative picture showing the parotid mass.

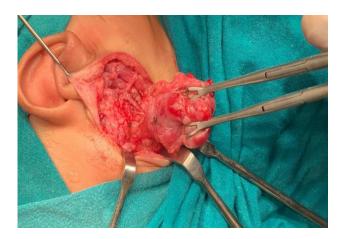


Figure 4: Intraoperative picture during removal of parotid mass.



Figure 5: Surgical specimen.

DISCUSSION

Less than 1% of head and neck neoplasms in children are salivary gland tumours, which are uncommon.⁴ The parotid is the salivary gland that is most frequently impacted. The majority of parotid tumours in the first year of life are haemangiomas, which make up about 50% of cases.^{5,6} Parotid haemangiomas have the potential to grow significantly, severely deforming the face. Furthermore, the remaining effects of the tumour, such as loose skin, scarring, and telangiectasias, may prevent the cheek skin and underlying tissue from returning to their usual appearance after involution.^{2,7} It is difficult to predict which patients will have complete involution and which will have residual disfigurement because the size of the haemangioma, location, gender, and age of presentation have no bearing on the clinical course.² Unfortunately, children with massive, deforming haemangiomas of the parotid gland and overlying cheek have not received effective medical treatment. Interferon and steroids have been shown to be ineffective.⁸ Physical examinations usually reveals parotid haemangiomas. Ultrasonography, computed tomography, and magnetic resonance imaging can all be used to confirm these tumours. Because of its low cost and non-invasive nature, ultrasonography may be

appropriate for the initial evaluation of paediatric salivary gland lesions. Because of its excellent soft tissue resolution, magnetic resonance imaging may be the preferred method of investigation for vascular lesions involving the parotid gland. Parotid haemangiomas may only be successfully treated surgically. Particularly in older children with involution, the majority of a parotid haemangioma is placed superficial to the facial nerve, allowing surgical reduction without nerve injury. Without doing a formal facial nerve dissection on younger children, considerable volume reduction is possible. Early resection is an acceptable course of treatment when performed by a skilled surgeon familiar with the architecture of the facial nerve and parotid area, as demonstrated by our case report.

CONCLUSION

Surgery before involution is still debatable, even though it is commonly recognised for older children with residual haemangiomas. Children with significant cutaneous involvement from parotid haemangiomas frequently have persistent deformity despite involution. Our findings suggest that when performed by an experienced surgeon who is familiar with the anatomy of the facial nerve and parotid region, early resection is a viable treatment option.

Funding: No funding sources Conflict of interest: None declared Ethical approval: Not required

REFERENCES

1. Seibert RW. Diseases of the salivary glands. In: Bluestone CD, Stool SE, Kenna MA, Editors.

- Pediatric Otolaryngol. Volume 2. 3rd Edition. Philadelphia: Saunders. 1996;1093-107.
- 2. Gammper TJ, Morgan RF. Vascular anomalies: Hemangiomas. Plast Reconstr Surg. 2002;110:572.
- 3. García CJ, Flores PA, Arce JD, Chuaqui B, Schwartz DS. Ultrasonography in the study of salivary gland lesions in children. Pediatr Radiol. 1998;28(6):418-25.
- 4. Bentz BG, Hughes CA, Lüdemann JP, Maddalozzo J. Masses of the salivary gland region in children. Arch Otolaryngol Head Neck Surg. 2000;126(12):1435-9.
- 5. George CD, Ng YY, Hall-Craggs MA, Jones BM. Parotid haemangioma in infants: MR imaging at 1.5T. Pediatr Radiol. 1991;21(7):483-5.
- Hughes RG, Oates J. Capillary haemangioma of the parotid in an adult: an unusual case and a review of the literature. J Laryngol Otol. 1997;111(6):588-9.
- 7. Mulliken JB, Rogers GF, Marler JJ. Circular excision of hemangioma and purse-string closure: the smallest possible scar. Plast Reconstr Surg. 2002;109(5):1544-54.
- 8. Blei F, Isakoff M, Deb G. The response of parotid hemangiomas to the use of systemic interferon alfa-2a or corticosteroids. Arch Otolaryngol Head Neck Surg. 1997;123(8):841-4.
- 9. Huchzermeyer P, Birchall MA, Kendall B, Bailey CM. Parotid haemangiomas in childhood: a case for MRI. J Laryngol Otol. 1994;108(10):892-5.

Cite this article as: Goyal P, Kumawat K. Parotid salivary gland haemangioma in paediatric patient: surgical option. Int J Sci Rep 2023;9(5):169-71.