



CASE STUDY

OPEN ACCESS

PAEDIATRIC PAROTIDECTOMY - AN ENIGMA -CASE REPORT

Manish Munjal, *Japneet Kaur, Venus Tilavat, Gopika Talwar,
Shubham Munjal and Isha Kapoor

DMC Ludhiana, Civil Lines, Punjab, India

ARTICLE INFO

Article History:

Received 15th October, 2017
Received in revised form
26th November, 2017
Accepted 07th December, 2017
Published online 31st January, 2018

Key Words:

Parotidectomy, Paediatric,
Parotid Gland.

ABSTRACT

Paediatric Parotidectomy in specific indications is fraught with complications, facial palsy, Freys and lobule numbness. Meticulous magnified loupe or microscope assisted dissection utilising natures landmark s is the best resort.

Copyright © 2018, Manish Munjal et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Manish Munjal, Japneet Kaur, Venus Tilavat, Gopika Talwar, Shubham Munjal and Isha Kapoor. 2018. Paediatric Parotidectomy - An enigma -Case report, *International Journal of Development Research*, 8, (01), 18663-18665.

INTRODUCTION

Persisting pre auricular swelling with inconclusive opinion on fine needle aspiration cytology necessitates surgical intervention, the minimal being a superficial parotidectomy whatever the age maybe. In the paediatric age group the common swellings maybe a hamartoma, atypical mycobacterium or bronchial cyst anomaly. The complication of incomplete eye closure and angle mouth deviation is signatures of the operative surgeon. A dreaded sequelae of Surgical insult to the facial nerve in the vicinity of the pathology. Palsy in this age group effects the psyche of the child and the parents alike. Paresis secondary to nerve traction, if it recovers in 6 weeks to a year is acceptable but if the nerve is severely damaged necessitating an anastomotic intervention or slings and implants, then the results in this age group are unpredictable. Therefore Surgery in this age group mostly is undertaken in high volume centres.

Case report

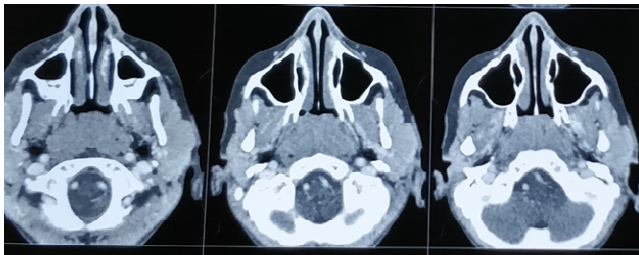
A 13 year boy presented with a swelling of the preauricular region for 1 year.

Corresponding author: Japneet Kaur,
DMC Ludhiana, Civil Lines, Punjab, India.

The swelling was firm on palpation and had not regressed with antibiotics and analgesics. Even alternative system of medicine had been resorted to without relief. The overlying skin had patchy areas of discoloration, (Picture 1) secondary to some topical heat application therapy. Fine needle aspiration cytology from the swelling was reported as pleomorphic adenoma and computed tomography As pleomorphic adenoma involving superficial lobe (Picture 2). He was taken up for exploration under general Anaesthesia. The modified retro tragal blairs incision was given and the flap elevated to expose the parotid fascia, till the anterior border of the parotid gland. The swelling could not be delineated from the gland, therefore it was planned to undertake a superficial Parotidectomy, thereby removing the swelling along with the superficial lobe of the parotid. The posterior division of the greater auricular nerve was identified and preserved while the anterior cut and stump ligated, thereby facilitating a posterolateral mobilisation of the tail of the parotid The tragal pointer, posterior belly digastric, stern mastoid convergence pointer were utilised to identify the facial nerve (Picture 3) which was followed anteriorly to its bifurcation (Picture 3). The superior and inferior divisions were further dissected out, thereby lifting the gland off the “Pes Anserinus “ (Picture 4) A drain was placed in the parotid bed to maintain a negative pressure to obliterate the dead space.



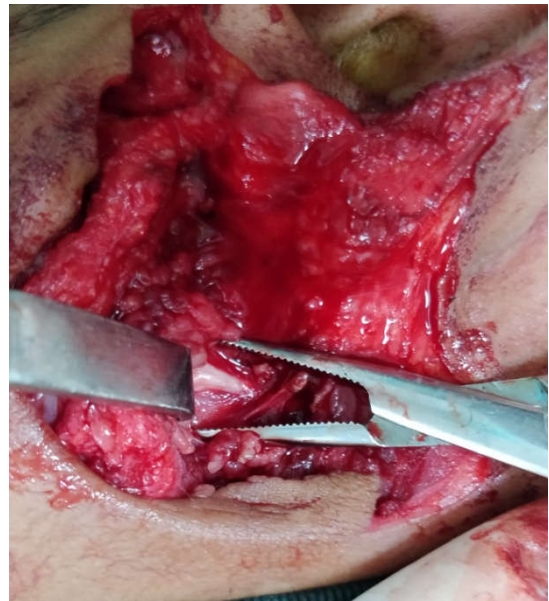
Picture 1. Preauricular swelling



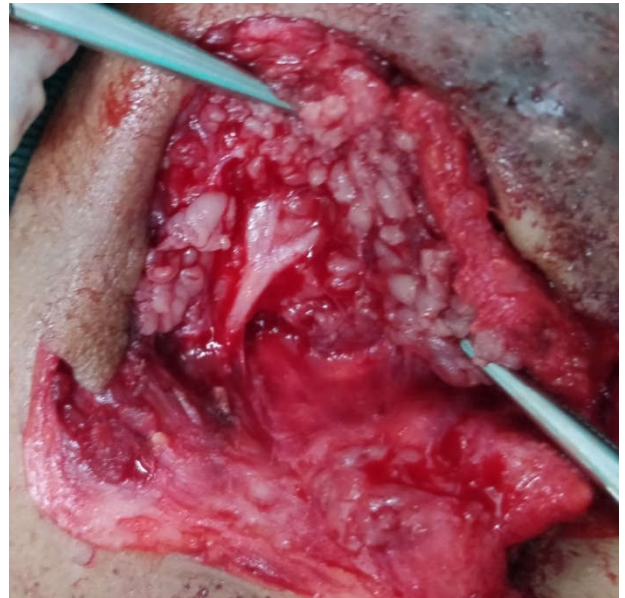
Picture 2 a. Axial CT showing — cm swelling in relation to parotid



Picture 2 b Coronal CT showing — cm swelling in relation to parotid



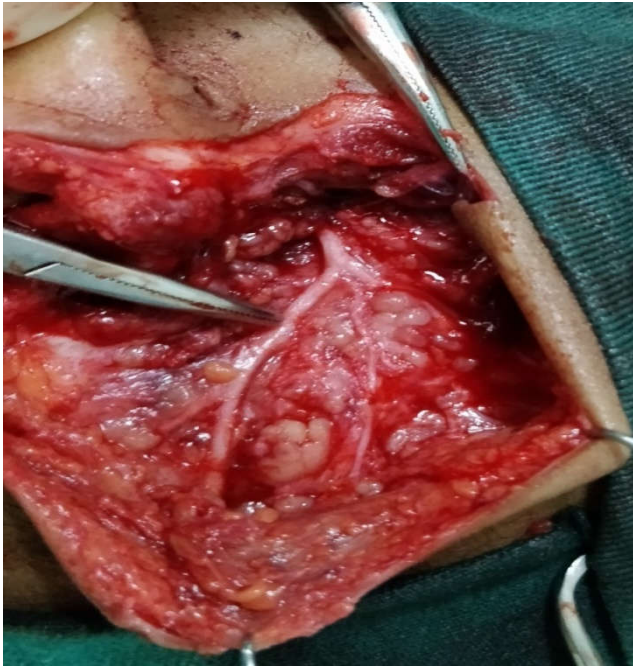
Picture 3. Main division of facial nerve



Picture 4. Bifurcation of main division of facial nerve into upper and lower divisions



Picture 5. Upper division of facial nerve



Picture. 6 Lower division of facial nerve

Post operative phase was uneventful with excellent functions of all divisions. (Picture 5).

DISCUSSION

Parotid masses in children are uncommon and consists of various lesions. the commonest salivary gland swellings in childhood are vasoformative. More than 80% of cases of parotid surgery in the pediatric population are performed for benign inflammatory disease or masses of the parotid gland (Orvidas et al., 2000; Al-Mazrou , 2007; Xie, 2010; Patel et al., 2012; Owusu et al., 2013). Salivary gland neoplasms constitute 8% of pediatric head and neck tumors and are the fourth most frequent head and neck neoplasm after the nasopharynx, skin, and thyroid (Ribeiro Kde, 2002). They can arise from an epithelial or non epithelial origin and can be subdivided into benign, low-grade malignancies and high-grade malignancies. Compared to adults parotid neoplasms in children are less common and have higher incidence of malignancy Mucoepidermoid carcinoma is the most common salivary gland malignancy in children and accounts for half of salivary gland malignancies; it is chiefly found in teenagers, and it is also the most common radiation-induced tumor in children. However, parotid surgery is relatively rare at most centres and carries a low, but significant, risk of facial nerve injury. Most surgeons will not perform a high volume of pediatric parotidectomies.

Fine needle aspiration biopsy is useful in evaluating salivary gland lesions, and has been reported (Cajulis, 1997) to have a specificity of 91% and a sensitivity of 96% when sufficient cells are present Parotidectomy in the pediatric population presents unique challenges. The smaller size of the patient and facial nerve, incomplete maturation of the mastoid process with resultant lateral location of the facial nerve position, and inflammatory nature of many of the lesions found in pediatric patients are all reasons dissection may be more challenging (Farrior, 1985). Scar hypertrophy is more common in children than in adults.

Conclusion

Pediatric parotid masses are less common as compared to adults but have higher incidence of malignancy. Pediatric parotid surgery poses unique challenge due to anatomical variation.

REFERENCES

- Al-Mazrou KA. 2007. Pediatric parotidectomy: indications and complications. *Saudi Med J.* 28(8):1218-1221.
- Cajulis RS Gokaslan ST Yu GHFrias-Hidvegi D. 1997. Fine needle aspiration biopsy of the salivary glands: a five-year experience with emphasis on diagnostic pitfalls. *Acta Cytol.* 411412- 1420
- Farrior JB, Santini H. 1985. Facial nerve identification in children. *Otolaryngol Head Neck Surg.*, 93 (2):173-176.
- Orvidas LJ, Kasperbauer JL, Lewis JE, Olsen KD, Lesnick TG. 2000. Pediatric parotid masses. *Arch Otolaryngol Head Neck Surg.*126(2):177-184.
- Owusu JA, Parker NP, Rimell FL. 2013. Postoperative facial nerve function in pediatric parotidectomy: a 12-year review. *Otolaryngol Head Neck Surg.*, 148(2):249-252.
- Patel S, Rastatter J, Madalozzo J. 2012. Parotid lesions in children undergoing parotidectomy: the Children's Memorial Hospital experience. *Otolaryngology.*(S4):002. doi:10.4172/2161-119X.S4-002.
- Ribeiro Kde C, Kowalski LP, Saba LM, et al. 2002. Epithelial salivary glands neoplasms in children and adolescents: a forty-four-year experience. *Med Pediatr Oncol* 39:594–600.
- Xie CM, Kubba H. 2010. Parotidectomy in children: indications and complications. *J Laryngol Otol.* 124(12):1289-1293.
