Diagnostic disparities in major salivary gland tumors

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Objective: This study aimed to analyze diagnostic disparities encountered while dealing with major salivary gland malignancies and implicates its role in deciding whether to resort only to the FNAC reports in major salivary gland lesions to determine the treatment plan to avoid under treatment in malignant lesions having benign FNAC diagnosis.

Methodology: A retrospective analysis of treatment records of major salivary gland tumors operated in the Department of Otolaryngology and Head and Neck Surgery from August 2008 to July 2014 was done. Those having discrepancy between FNAC and post-operative biopsy were further reviewed to evaluate the accuracy of the FNAC and biopsy diagnoses given earlier by reexamination of the slides.

Results: A total of 128 surgeries including 13 revision surgeries were performed for 113 parotid, 14 submandibular gland and one sublingual gland lesions. These surgeries were performed on 72 males with 17 malignant, 54 benign and one metastatic lesion and 56 females with 13 malignant and 43 benign lesions. 5 out of 128 (3.90%) surgeries performed on FNAC proven benign lesions were found to be malignant in the post-operative biopsy. 4 FNAC diagnosed cases of pleomorphic adenoma were found to be mucoepidermoid Ca in 2 cases and adenoid cystic Ca and epithelial myoepithelial Ca in one case each. One case of Warthin's tumor was post-operatively diagnosed as mucoepidermoid Ca.

Conclusion: With such an incidence (5 of 128 i.e., 3.90%) of under diagnosis of major salivary gland lesions in preoperative FNAC questions the diagnostic accuracy of fine needle aspiration cytology. In view of the mimicking cytological pictures leading to a misdiagnosis seen both in the present study and in the literature, guide the clinician to decide surgical planning based on clinical, radiologic and intraoperative findings along with the FNAC rather than FNAC alone.

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Microscopic biploar vs cold steel dissection tonsillectomy in pediatric patients

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The objective of this study was to evaluate and compare microsurgical bipolar dissection tonsillectomy (MBDT) with traditional cold steel dissection tonsillectomy (CSDT). This was a comparative interventional study carried out in the otolaryngology department of a tertiary referral institute. In total, 60 patients planned for tonsillectomy were included in the study and were randomly divided into two groups. The results were compared in terms of operative time, intra-operative blood loss and postoperative pain and morbidity including the time taken for resumption of oral feeding and the amount of slough formation and edema observed at various times postoperatively. Mean operative time in the CSDT group (23.35±7.10 min) was significantly longer (p<0.001) than in the MBDT group (13.90±4.10 min). Intraoperative blood loss was significantly lower in the MBDT group (9.77±4.10 ml) when compared with the CSDT group (33.45±8.54 ml) (p<0.001). Early postoperative pain and time to resumption of first oral intake were lower in the MBDT group, though the differences were not statistically significant (p>0.05). Late postoperative pain measured on day 7 and time to resumption of a normal diet were not significantly higher in the MBDT group. No difference was found between the two techniques in terms of postoperative hemorrhage. No major complications occurred in either group. MBDT reduces operative time and intraoperative blood loss by providing better visualization of blood vessels under microscopic vision and combines the advantage of hemostatic cautery dissection and vessel coagulation. This, along with no significant difference in postoperative pain and morbidity, makes this technique particularly advantageous especially in the pediatric population with a low circulation volume.

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