Diagnostic accuracy of Ultrasound (US) and Fine Needle Aspiration (FNA) for diagnosis of parotid gland lesions

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Background

-U/S and FNA cytology is useful in assessing parotid gland pathologies. The British guidelines for head and neck cancer management recommends them for all salivary glands tumors, with accuracy of 80% and 90% respectively (1, 2).

Objectives

- To assess the diagnostic accuracy of U/S and FNA by comparing them to the final histopathological results in parotid lesions.
- To compare our performance and accuracy to the national and international figures.

Methods

- Retrospective analysis of U/S and FNA in correlation parotidectomy in a single center over 2 years.
- Patients with parotid pathology which they were posted for surgery in ENT department in Heartlands hospital between (1/9/2015-15/12/2017).
- Retrospective comparison of FNA results with the final histopathological results of the surgical specimen.

-Inclusion criteria:

- 1-Patient which was operated in the mentioned period
- AND**
- 2-Had preoperative FNA

- Total number of patients posted for surgery = 82
- Cancelled surgery = 9
- Patient who were Operated = 73
- Number of patients who had No Pre-op FNA = 9
- Number of patients who had No Pre-op U/S = 5
- Included patients who had (FNA + Surgery) = 73

Results

- U/S accuracy was (74%).
- Benign lesions was diagnosed in 68 patients (93%).
- Malignancy was identified in 5 (7 %) of the cases.
- **FNA sensitivity, specificity and accuracy was (75%,71% and 75.4%) respectively.**

Parotid lesions distribution
Benign vs .Malignant

Conclusion

- Our figures are lower than the national and international ones.
- U/S and FNA are useful tests. However, owing to sensitivity variation between centers, it is necessary to interpret results in the context of the clinical presentation.
- Local diagnostic yield should be considered upon further patients counseling.

References

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