The Role of Fine Needle Aspiration Cytology for Investigation of Paediatric Head and Neck Lumps

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Introduction

Role of FNAC in investigation of paediatric Head and neck lumps is not widely utilised.

FNA has high sensitivity 97-98% and specificity 93-98% [1]

Good for reactive/infectious superficial lesions.

Onsite evaluation is important

Objectives

To assess the diagnostic and clinical benefit of using FNAC in the management of paediatric head and neck lumps.

Does FNA alter our management?

Methods

A 3 year retrospective review of H&N including Thyroid FNAC performed at a tertiary paediatric centre with histological correlation.

Single surgeon

Topical LA

US-guided

On-site biomedical scientist for assisting in sample preparation

Results 1

13 patients
8 male 5 female
Mean age 13.6 years (range 10 days – 16 years)
5 nodes, 4 salivary glands, 4 thyroid
42% malignant
PPV 100%
NPV 100%
25% thyroid lesions malignant

Discussion

No post-procedural complications

High PPV and NPV in paediatric population

53% had management directly influenced by FNA result (hemithyroidectomy, parotidectomy +/- neck dissection, decision not to treat)

Useful in older children (10-15 yrs)?

Conclusion

FNAC is an important adjunct and has a high sensitivity, positive and negative predictive value in the paediatric population

In thyroid nodules it can guide decision making between hemi and total thyroidectomy.

The use of topical LA and sedation could facilitate its use in younger children.