The Role of Fine Needle Aspiration Cytology in the Evaluation of Gall Bladder Masses, Polyps and Wall Thickening

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Introduction

- Gall bladder carcinoma is an aggressive malignancy common in India as cholelithiasis is also very common in India
- These tumors present in late stage and often with liver spread
- Risks and benefits of FNAC in gall bladder are not well defined, which is attempted in this retrospective study

Material & Method

- Gall bladder aspirations from 2014 to 2018 were retrieved and reviewed
- CT scans and clinical files were reviewed wherever available and correlated with the cytology findings
- Histopathology of the resection specimens was also re-examined

Results

1005 cases of gall bladder FNA in last five years

Large masses
765 cases
639 POS
63 INC/SOM
24 NEG
39 UNS

Polyoidal masses
7 cases
3 POS
2 INC
2 UNS

Wall Thickening
233 Cases
119 POS
42 INC/SOM
42 NEG
30 UNS

Mucinous carcinoma
Signet ring carcinoma

Gall bladder intraluminal mass; Should not undergo FNAC because such masses might be operable
GB thickening benign but will benefit from FNAC to prevent any surprise. No risk because radiologically benign
Gb asymmetric thickening probably malignant due to invasive component and inoperable-so do FNAC

POS=Positive for malignancy,
INC/SOM=Inconclusive/Suspicious of malignancy,
NEG=Negative, UNS=Unsatisfactory

Wall Thickening on Radiology;
Operable favour benign: do FNAC to exclude malignancy

Conclusion

- Operable favour malignancy: if looks curable don’t do FNAC
- Inoperable masses: do FNAC to document carcinoma and give chemotherapy
- If malignancy is in doubt with D/D of tuberculosis or xanthogranulomatous cholecystitis: do FNAC to plan the extent of surgery

Inoperable gall bladder masses not amenable to surgical resection should undergo FNAC to confirm diagnosis before starting chemotherapy
- Polypoidal masses where surgery can be done should be undertaken for a resection without FNAC, since there is a risk disseminating a tumor which is otherwise curable with surgery
- However, polypoidal masses with wall thickening close to vessels need FNAC for proper planning of surgery
- Gall bladder wall thickening should undergo FNAC for proper planning of surgery
- FNAC confirmation before surgery avoids morbidity associated with liver wedge resection, which is not required in wall thickening due to inflammatory pathology
- Review of CT scans with the radiologist before reporting gall bladder FNAC is essential for proper evaluation