

PRESENTER:

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BACKGROUND

- Endoscopic Ultrasound (EUS)-guided fine needle aspiration (FNA) and fine needle biopsy (FNB) are the current standard of care for making a diagnosis in solid pancreatic lesions (SPLs). There is conflicting data on the diagnostic utility of cytology and histology for diagnosing SPLs.

METHODS

- A retrospective chart review was performed and all patients greater than 18 years with solid pancreatic lesions who underwent EUS between October 2019 and June 2021 were included.
- All the procedures were performed by a single advanced endoscopist, and same needle (Acquire 22G, Boston Scientific) was used for all the procedures.
- Primary outcomes assessed were diagnostic advantage of cytology and histology in terms of providing a final diagnosis and diagnostic accuracy of cytology and histology with surgery specimen being the gold standard. Secondary outcomes assessed were relation of diagnostic accuracy to specimen length, no. of passes and size of lesion using t-test.

RESULTS

- A total of 59 patients were included in our study with majority of them being males (52.4%). Mean age was 67.13 years.
- Data regarding route of biopsy was available for 36 patients (22 transduodenal and 14 transgastric).
- Mean needle passes per patient were 4.25 and average size of lesion on EUS was 3.7 cm. Turnaround time of histology was superior (2.7 days) as compared to cytology (3.3 days).

Histology and cytology are important in conjunction with each other for maximizing the diagnostic accuracy of solid pancreatic lesions.

RESULTS

- In 39 cases, there was agreement between histology and cytology and 36/39 (92%) of those were malignant. Of the remaining 20 patients, histology was found to be more advantageous for 17 (85%) patients while cytology was more advantageous for the other 3 patients (15%).
- All 3 cases where cytology was advantageous were malignant. Of the 17 histologically advantageous cases, 15 (88%) were malignant.
- There were 8 cases where surgery was performed allowing for estimation of the diagnostic accuracy of the histology and cytology. The histological diagnosis and cytological diagnosis were accurate in 7/8 (88%) and 3/8 (38%) respectively.
- T-test did not show any significant difference between two groups in relation to diagnostic accuracy to specimen length, no. of passes and size of lesion.

CONCLUSION

- Histology provided more accurate diagnosis for discordant cases and had faster turnaround times. However, there were malignant cases diagnosed on cytology which could have been missed if only histology was performed.

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