

Research paper 21

RP 21

An audit of endoscopic ultrasound-guided fine needle aspiration cytology for pancreaticobiliary specimensL. N. Rahubaddha¹, H. D. Wijesinghe^{1,2}, N. Fernandopulle³, M. V. C. De Silva^{1,2}¹Department of Pathology, Faculty of Medicine, ²Centre for Diagnosis and Research in Cancer,³Department of Surgery, Faculty of Medicine, University of Colombo, Sri Lanka

Introduction and objectives: Endoscopic ultrasound-guided fine-needle aspiration cytology (EUS-FNAC) is a minimally invasive diagnostic modality for pancreaticobiliary lesions. Our objective was to describe the cytological spectrum of EUS-FNAC for pancreaticobiliary specimens in our institute.

Methodology: Cytology smears and cell block preparations of EUS-FNAC pancreaticobiliary samples received between January 1, 2018, and March 31, 2022, at our institute were reviewed and reclassified according to the six-tiered standardized terminology and nomenclature for pancreaticobiliary cytology from the Papanicolaou Society of Cytopathology. Clinical and radiological data were retrieved from request forms and endoscopy reports.

Results: Seventy-nine cases (40 females and 39 males) were identified. The mean age was 51.59 years (SD=15.06, range=20-78). Majority were from the head (n=44, 55.7%) followed by the body (n=17, 21.51%). There were 46 (58.2%) solid and 33 (41.8%) cystic lesions. Solid lesions were categorised as, 16 (34.8%) – non-diagnostic (Category-I), 6 (13.0%) – negative for malignancy (Category-II), 5 (10.9%) – atypical (Category-III), 5 (10.9%) – neoplastic: other (Category-IVB), 3(6.5%) – suspicious for malignancy (Category-V), and 11 (23.9%) – malignant (Category-VI). The cystic lesions were categorised as, 22 (66.7%) – non-diagnostic (Category-I), 4 (12.1%) – negative for malignancy (Category II), 3 (9.1%) – neoplastic: benign (Category-IVA), 3 (9.1%) – neoplastic: other (Category-IVB), and 1 (3.0%) – malignant (Category VI). A definitive diagnosis was reached in 34 cases (adenocarcinoma-11, inflammatory lesion/pancreatitis-10, solid pseudopapillary neoplasm-4, serous cystadenoma-3, neuroendocrine tumour-2, intraductal-papillary mucinous neoplasm-1, pseudocyst-1, gastrointestinal stromal tumour-1, renal cell carcinoma metastasis-1).

Conclusion: A definitive diagnosis was reached in 43% of cases. There was a high non-diagnostic rate, especially among the cystic lesions. The availability of biochemistry for cystic lesions, rapid onsite evaluation of samples and improved processing of material for optimal specimen preservation may help reduce the non-diagnostic rate.

Keywords: Papanicolaou Society of Cytopathology, pancreaticobiliary, fine needle aspiration cytology, malignancy

Corresponding author: Ms Lakma Rahubadda

Department of Pathology,

Faculty of Medicine, University of Colombo, Sri Lanka

lakrahubaddha@gmail.com



This is an open access article licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/). (CC BY-SA 4.0), which permits unrestricted use, distribution and reproduction in any medium, provided the original author and source are attributed and materials are shared under the same license.