Title: Mangalore system for reporting serous effusion in pleural, peritoneal and pericardial cavity.

Zahida OA, Krishnaraj Upadhyaya
Department of pathology, Yenepoya Medical College, Yenepoya University, Mangalore,Karnataka, India

Abstract

Abstract: One of the greatest diagnostic dilemmas in cytopathology is in the realm of effusion cytology. In many cases, a definitive diagnosis cannot be reached based on morphology alone, thus, the diagnostic accuracy of effusion cytology were enhanced though the utilization of ancillary techniques. Further to bring about developing a new methodology for reporting serous effusion fluids and updating this system can bring best outcome for patient care.

Materials and method: Prospective study of 216 effusion fluids from Yenepoya medical college, Mangalore, conducted from October-2014 to April-2016, was scrutinized and approved by Institutional Ethics Committee. The samples were processed by conventional cytology using Papanicolaoustain and cell block (CB) method using 10% Alcohol-formalin fixative and stained with hematoxylin and eosin, and ancillary immunohistochemical staining with calretinin and EMA were done. Lesions were categorized into four major and further sub categorized. They were 1) Unsatisfactory for evaluation 2) Benign reactive effusion 3) Atypical/suspicious reactive effusion [a. Atypical mesothelial cells, b. Atypical epithelial cells, c. Atypical mesenchymal cells, d. Atypical cells – unable to categories (hematological malignancy)]. 4) Effusion fluid – positive for malignant cells [a. Positive for malignant cells probably adenocarcinoma, b. Positive for malignancy probably squamous cell carcinoma, c. Positive for malignancy probably mesenchymal tumours, d. Positive for hematological malignancy, e. Positive for mesothelioma].

Conclusion: We conclude that cell block technique when used as an adjuvant to routine smear examination in effusion fluids has increased the diagnostic yield and better preservation of architectural pattern. Further Mangalore system for categorizing serous effusion fluid has increased the diagnostic efficacy and also helpful for both clinician and patient.



Biography:

Zahida O A has completed her MD pathology from Yenepoya medical college, Yenepoya University, Mangalore, Karnataka, India under Karnataka medical council, and currently working as senior resident. She has presented two oral papers in national level and a poster in international level. She has published two papers in reputed journal. She has attended more than ten national and international conferences and also attended many CME and symposium. She is an admirer of cytology and done research study in cytomorphological analysis of serous effusion fluids.

zahida.oa@gmail.com

Notes/Comments: