

MALIGNANT EFFUSIONS: A FIVE-YEAR CYTOLOGY EXPERIENCE IN A TERTIARY PEDIATRIC HOSPITAL



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INTRODUCTION

Effusions may be a presenting symptom or a sign of disease progression, hence cytologic evaluation is an important tool in the management of these patients.

OBJECTIVES

This study aims to assess the cytology of effusion fluids in pediatric patients with malignant neoplasm in Philippine Children's Medical Center from January 2016 to December 2020.

METHODS

This is a descriptive study that assessed the overall prevalence of malignant effusions in Philippine Children's Medical Center from January 2016 to December 2020.

RESULTS

There were 87 subjects with body fluid cytology included in the study. The prevalence of malignant effusion was 9.2% (8/87). Majority (81.6%) of the effusions submitted for cytologic evaluation were from the pleural cavity. Eight(8) subjects were diagnosed as positive for malignancy, two(2) of which had hematologic malignancies (25.0%) and two had intra-abdominal mass (25.0%). The other clinical diagnoses were malignant histiocytic sarcoma, neuroblastoma, probably malignant, and to consider Wilms tumor. There were two diagnosed as suspicious for malignancy (2.3%) and seven with atypical cells (8.0%), both of which warrant further investigation.

CONCLUSION

This study found that the prevalence of malignant effusion in children was 9.2%. The most common malignancies associated with malignant effusions were hematologic malignancies and malignant tumors of the small round blue cell. Majority of the specimen submitted were from the pleural cavity, bloody, and turbid. However, there is no association between these characteristics and the final diagnosis.

RECOMMENDATION

Currently, there are no consistent classification system in reporting of serous fluid cavity cytology. The words "atypical" and "suspicious" may convey uncertainty, hence ancillary tests are warranted.

KEYWORDS

Malignant effusion, Pediatric Population, Filipino