Intelligent Technology to Screen for Pediatric Lymphadenopathy in Medical Laboratories

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ABSTRACT

Objective: Fine Needle Aspiration Cytology (FNAC) is considered as a well-established method in adult oncology, and it is also highly recommended for the diagnosis of childhood tumors. This study aims to investigate the common causes of lymphadenopathy in pediatric population particularly in Saudi children by using FNAC technique.

Methodology: The study samples were collected randomly from 100 pediatric patients of 1 to 15 years of age who visit different pediatric clinic centers of Riyadh, KSA. The samples were obtained by professional pathologists and pediatric surgeons in accordance with the standard procedure.

Results: Cytological diagnosis revealed 11 cases of reactive lymphadenopathy, 3 cases of granulomatous lymphadenitis, and 16 cases of malignancy out of which 10 patients had non-Hodgkin’s (NHD) and 6 patients had Hodgkin’s lymphomas (HD)

Conclusion: This study confirmed that the FNAC is a useful diagnostic tool and can be used during the investigation of peripheral lymphadenopathy in pediatric patients.

Keywords: Lymphadenopathy, Tumors, Infection, Malignancy, Surgery, Saudi Arabia

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