

Title of thesis: Evaluation of Epstein-Barr virus infection in children with sore throat in Fayoum Governorate

Supervisors:

Prof. Dr. Essam El-Din Gad El-Rab Ahmad Mawad

Dr. Hossam El-Din Mahmood Abd El-Aziz Ali

Dr. Eslam Rabie Abd El-Aziz Abd El-Bakky

Name of candidate : Sara Othman Metwalli Abd El-Bakky

Department: Pediatrics

Abstract

Background: Sore throat is one the common reasons for outpatient and emergency visits among children . It could be because of several etiologies; of these bacterial pharyngitis is the most important. Most sore throats are caused by viruses such as Epstein Barr virus, corona virus, rhinovirus, influenza and parainfluenza. Less often, sore throats are due to bacterial infections. EBV is one of the most common causes of viral sore throat. Basic and cheap laboratory tests ; complete blood count, peripheral blood smears- for atypical lymphocytes , EBV IgM antibody against VCA (viral capsid antigen) and monospot test are simply needed for diagnosis . Glucocorticoids and antivirals don't reduce the length or severity of infectious mononucleosis.

Objectives: The study aimed to evaluate Epstein-Barr Virus infection in children with fever, sore throat, with or without cervical lymphadenopathy.

Materials and Methods: Our study is cross-sectional descriptive study. It included 100 patients aged between 1 year up to 12 years old who sought medical advice at general pediatric clinics, at Fayoum Governorate and presented with sore throat, fever , with or without cervical lymphadenopathy during a period of 3 months from November 2021 till January 2022.

Results: Out of 100 cases showing manifestations of pharyngitis : 10-cases (10.0%) were diagnosed as infectious mononucleosis; 4-cases were diagnosed by EBV VCA IgM antibody ,while 6- cases were diagnosed by monospot test(6.0%). All cases were older than 2 years of age.

Conclusion: Careful History and Examination are very important in all cases of sore throat. Laboratory tests can be the next step to confirm the diagnosis in case of infectious mononucleosis. It can be diagnosed by atypical lymphocytosis in peripheral blood, EBV VCA IgM antibodies and monospot test.

Keywords: Pharyngitis, infectious mononucleosis, EBV-IgM antibodies , Heterophile antibodies (monospot test).