

IMPACT OF NEW DIAGNOSTIC METHODS IN MICROBIOLOGY TO IDENTIFY UPPER RESPIRATORY TRACT PATHOGENS.

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Upper respiratory tract infection (URI) is a nonspecific term used to describe acute infections involving the nose, paranasal sinuses, pharynx, larynx above the vocal cords. The aim of this study is to provide an summary of the most common pathogens of URI and compare microbiological tests used to identify them. Viruses cause most acute URIs, in both children and adults, acute respiratory infections (ARI) are most frequently due to infections with Influenza A and B viruses, Parainfluenza viruses 1, 2 and 3, Respiratory Syncytial Virus A and B, Adenoviruses and Rhinoviruses. Group A beta-hemolytic streptococci cause 5% to 10% of cases of pharyngitis in adults. The FilmArray[®] Respiratory Panel enables rapid and accurate automated detection of pathogens behind respiratory infections. It tests for 17 viruses and 3 bacteria which cause upper respiratory tract. It works on the certified multiplex PCR system. Benefits of this modern method are compared with traditional diagnostic tools. Case reports of 2 patients from the Martin University Hospital have been studied. The advantages of FilmArray[®] Respiratory Panel for the patient are that detection of pathogens is quick and exact. Rapid and specific detection of the virus or bacteria is essential to provide adequate therapy.