

Epidemiological and clinical features, microbiological findings and prognosis of pediatric infective endocarditis in a teaching hospital in Tunisia.

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Introduction

Infective endocarditis is a serious disease caused by the attachment and multiplication of germs in the endocardium. Mortality and morbidity of this disease are still significant despite advances in microbiological diagnosis, medical and surgical treatment.

Aim of the study

Study the clinical, microbiological, therapeutic and outcome features of infective endocarditis in children.

Methods

Retrospective study including 24 children with infective endocarditis collected in the pediatric department of Sahloul Hospital over a period of 19 years (from 1995 to 2013). Duke criteria was used to establish the diagnosis of infective endocarditis.

Results

24 patients were involved in the study; 15 girls and 9 boys. The average age at diagnosis was 5 years old (40 days-13 years). The first symptom was a fever in all cases. Clinical findings-signs showed a heart murmur in 17 cases and acute heart failure in 7 cases. Infective endocarditis had occurred on a plot of congenital heart disease in 17 cases, rheumatic heart disease in 2 cases and on healthy heart in 5 cases. Endocardium structures affected by endocarditis, identified with ultrasound, was mitral valve in 7 cases, 4 cases in aortic, tricuspid in 6 cases, pulmonary in 2 cases, on ventricular septal defect in 5 cases, at the ductus arteriosus, in a case of the ventricular wall in one case and a tube RV-PA in a case. The infectious agent was identified in 14 cases: it was a staphylococcus in 7 cases, Gram-negative bacilli in 5 cases, in one case a streptococcus and candida in one case. Antibiotics (cefotaxime+ fosfomicin ++ aminoglycoside) was administered in most cases. Cardiac surgery was used in 3 cases, the outcome was favorable in most of our patients. However eight children had complications kind cerebral stroke (7 cases), pulmonary embolism (1 case) and seven children had fatal outcome.

Conclusion

Infective endocarditis stills a serious disease by its local and general complications and by its mortality rate remaining high. Several questions are asked regarding the prevention of infectious diseases and the application of asepsis in our daily practice.