

petechiae, Janeway lesions. Rhythmic heart murmurs, HR 90 b/min, systolic murmur at the apex and diastolic at the aorta, BP 90/50 mmHg. Paraclinically: BC beta-hemolytic streptococcus. ECG: mobile vegetations on MV 10 mm and AoV 12 mm; regurgitation on MV, AoV and TsV of grade III, EF 56%; radiologically – bilateral septic pneumonia; Hb 89 g/l, erythrocytes 2.8×10^{12} , leukocytes 11×10^9 , ESR 66 mm/h; ASLO-1:400; FR 48 U/l. Treatment with 2 antimicrobial regimens in maximum doses, antifungals, diuretics, fractionated direct anticoagulants, nootropic medication.

Conclusion(s). Infective endocarditis can often occur with polyorganic embolic complications, more frequently with stroke and pulmonary thromboembolism, which negatively influence the evolution and prognosis of the disease, causing disability. The treatment of these patients is complex and individualized.

Keywords: stroke, infective endocarditis, individualized therapy

CNS DAMAGE IN CYTOMEGALOVIRUS INFECTION - CLINICS AND DIAGNOSIS

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Background. Congenital cytomegalovirus (CMV) infection is a leading non-genetic cause of sensorineural hearing loss and neurodevelopmental impairment in children. CNS involvement greatly impacts morbidity. This study reviews clinical features, diagnostic methods, and neuroimaging findings in pediatric patients.

Objective(s). This study aims to review and analyze the clinical features, diagnostic tools, and neuroimaging findings of CNS damage due to congenital CMV in children to enhance diagnosis and management.

Materials and methods. A systematic review was conducted through PubMed, Embase, and Cochrane databases from 2000 to 2024. Pediatric patients (<18 years) with confirmed CMV infection were included. Data were extracted on neurological manifestations, CSF findings, neuroimaging features (USG, MRI), and diagnostic tools including PCR and serology.

Results. Across 32 studies encompassing 5,217 pediatric patients with CMV infection, CNS involvement was noted in 38–75% of symptomatic neonates. Clinical features included microcephaly (45%), seizures (28%), hypotonia (35%), and developmental delay (52%). MRI findings predominantly showed periventricular calcifications, ventriculomegaly, migrational abnormalities, and cerebral atrophy. CSF PCR demonstrated high specificity (>90%) for CMV detection. Neonates with abnormal neuroimaging had significantly lower cognitive and motor scores on follow-up. Sensitivity of dried blood spot PCR for early diagnosis was 84%, while urine CMV PCR remained gold standard.

Conclusion(s). Congenital CMV infection has a significant risk on CNS damage and neurodevelopmental deficits. Early diagnosis using clinical evaluation, neuroimaging, and PCR is vital for better outcomes. Standardized neurodevelopmental monitoring protocols are essential to improve prognosis and guide treatment.

Keywords: congenital CMV, sensorineural hearing loss, CMV, PCR, MRI