CLINICAL EXPERIENCE OF TREATMENT OF ACUTE HEMATOGENOUS OSTEOMYELITIS IN CHILDREN

Sergey Minaev¹, Natalia Filipeva¹, Vitaliy Leskin², Sergey Timofeev¹, Alexander Kachanov¹,
Alesya Isaeva¹, Eldar Shamadaev¹

1-Stavropol State Medical University, Stavropol, Russian Federation
2-Regional Children Clinical Hospital, Stavropol, Russian Federation;

Osteomyelitis is infection and inflammation of the bone and bone marrow. It can be usefully subclassified on the based on the causative organism (pyogenic bacteria or mycobacteria) and the route, duration and anatomic location of the infection.

Aim of the study was to evaluate the outcomes of treatment of Acute Hematogenous Osteomyelitis (AHO) in children.

Methods: The study included 93 children with AHO aged 3 to 16 years old. There were 57 boys (61.3%) and 36 girls (38.7%). Practical relevance of the study was to provide an adequate operative treatment with sufficient drainage of primary infections site and prevent appearance of burrowing pus (based on CT and MRI). The most frequently isolated pathogen was S. aureus (n=81; 87.1%, of which 2.2% were MRSA). The main culture sources of primary pathogens were intraoperative bone aspirates and blood. All patients received postoperative antibiotic therapy. Combinations of Cephalosporins II-III generations with Amikacin were most frequently used. Also patients had a monotherapy (Vancomycin or Daptomycin).

Results: The clinical success was achieved in more patients. Morality cases were not observed. Duration of hospitalization was 19±0.7 days. Registered complications of AHO were transition to a chronic form in 3 (3.2%) patients, fistula formation - 2 (2.2%) and pathological fracture - 1 (1.1%).

Conclusion: Based on the results of our experience, integrated approach was found to be effective and safe in patients with AHO. Histological and microbiological tests were very important in AHO treatment as well.

References: