SHORT COURSE OF ANTIBIOTHERAPY FOR OSTEOARTICULAR INFECTIONS IN MONTPELLIER UNIVERSITY HOSPITAL, A RETROSPECTIVE STUDY

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Introduction: Recent studies have shown the efficiency of 15 to 21 days of antibiotherapy in osteoarthritis and osteomyelitis in children.

Methodology: We evaluated this short-term protocol of antibiotherapy in these cases in the University Hospital of Montpellier by a retrospective study. We excluded spondilodiscitis, nosocomial infections, osteoarthritis with surgical implanted material, children that received recent antibiotherapy and children over 15 years. Two to 4 days intravenous antibiotherapy was administered followed by oral antibiotics depending on the clinical and biological (CRP and fibrinogen) monitoring. The total duration of treatment was 15 to 21 one days. Bacterial diagnosis was made by culture and molecular biology (ARNr 16S and specific Kingella kingae PCR).

Results: Seventy six cases of osteoarticular infections were included in this study (24 osteomyelitis and 52 osteoarthritis). Forty six out of 76 patients have bacterial identification: 14 Staphylococcus aureus (all methicillin-susceptible), 12 Kingella kingae, 6 Streptococcus pyogenes and 6 others. The mean duration of antibiotherapy was 17.7 days for osteoarthritis and 15.5 days for osteomyelitis. Prognosis in all cases was good even though five children had more than 3 weeks of antibiotherapy, and 8 necessitated a new surgical intervention. Only six children required insertin of central venous catheters.

Conclusions: Our retrospective study suggests that a short-term antibiotherapy is possible with similar complication rate and prognosis than long-term antibiotherapy protocols. There is a need for a prospective study in these cases.