

MIRACLE RE-MODELLING OF BONE NECROSIS IN PANOSTEOMYELITIS IN PEDIATRIC AGE GROUP

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Introduction: Osteomyelitis is an infection of bone marrow and adjacent osseous structures with potential surrounding soft tissue extent. Osteonecrosis is death of cell population in a segment of bone following lost of blood circulation(1). In paediatrics age group, there is a chance of re-modelling of bone necrosis without any bone resection

Discussion: A 9year old boy with no known medical illness, alleged sports injury sustained left ankle swelling. Post trauma day 2, child developed persistent fever then treated in district hospital. Ultrasound showed ankle collection with surrounding tissue cellulitis. Patient underwent incision & drainage and arthrotomy washout, however complicated with left leg necrotising fasciitis. Then, multiple wound debridement done. Blood culture growth of MRSA Staphylococcus Aureus. Subsequently, he had evolving signs of infective endocarditis, then referred to tertiary hospital, diagnosed with pericardial effusion, thoracotomy pericardial effusion drainage done. MRI left tibia shows multiple patchy enhancing ill-defined lesions with associated cortical loss and periosteal elevations suggestive of osteomyelitis with surrounding inflammatory and arthritis changes. Wound inspection proximal tibia bone exposed(6cm x 3cm) and necrotic. Initially planned for bone resection and transportation. However due to parents not keen for bone resection and upon surgery, plain radiograph showed panosteomyelitis changes, thus proceeded with wound debridement, soft tissue coverage of tibia bone. He was given antibiotics for 2 months, miraculously, tibia bone start to remodel. 2 years post surgery, he is able to ambulate without aid, wound well healed, plain radiograph shows consolidation of left tibia with re-canalization seen.

Conclusion: Surgical debridement together with appropriate antibiotics is an important factor in treatment of chronic osteomyelitis in children. However, windows for re- modelling of bone necrosis without any bone resection in children may happened