Background and aim Osteomyelitis is an inflammation of the bone that is usually due to bacterial infection. There are limited data on osteoarticular infections in the state of Qatar. The objectives of this study were to describe the demographic, clinical presentation and microbiological culture result of acute osteomyelitis in children.

Methods A retrospective and descriptive study was conducted at main tertiary hospital. Children hospitalised in our paediatric department with acute osteomyelitis from January 2000 to December 2013 were included.

Results The study comprised 79 patients. Mean age of presentation was (5.7) years and (62%) were male. (91%) had acute osteomyelitis whereas (9%) were classified as chronic. Most common bones affected were Femur (39.2%), Tibia (15.2%) followed by Foot (11.4%) and iliac bone (10.1%). Fever higher than 38° on admission was found in (65.8%), joint pain (60.8%) and limping (45.6%). Tenderness on examination was present in (82.3%) followed by joint swelling (59.5%) and restricted joint movement (55.7%). Nearly (69%) of Blood culture were negative but, if positive, Staphylococcus species is the most causative organisms were methicillin-susceptible Staphylococcus aureus (9.1%), methicillin-resistant Staphylococcus aureus (9.1%) and Strep Pyognes in (3.9%).

Conclusion Our study confirmed that Microbiology screening tends to be negative but, if positive, Staphylococcus species is likely to be isolated. The metaphysis of long bones lower femur and upper tibia prone to osteomyelitis. Mono-therapy for bone infection might be beneficial to start initially.