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### Aetiology of long bone chronic osteomyelitis: An analysis of the current situation

**Background:** Chronic osteomyelitis (COM) is a debilitating disease for the patient and the healthcare system; analysing the local situation would provide better plans to tackle it.

**Methods:** Thirty-three patients (30men/three women) with osteomyelitis were treated in our centre between January-2019 and February-2022. All had COM; 16 tibial involvement (48%), ten femurs, four fibulas, two ulnae and one calcaneus.

Seventeen patients (52%) had postoperative COM after managing closed fractures by ORIF; 13 (40%) had open fractures, two hematogenous OM and one primary sclerosing OM. Three to six deep tissue samples (culture/sensitivity) were collected during index debridement and one histopathology sample.

At time of debridement, Cirenny-Madder classification of OM was diffuse in 23(70%), localised in six and intramedullary in four. 16(49%) patients had no implants, 15(45%) had internal fixation (nail/plate) and two had external fixation.

Results: The median interval between injury and onset of infection was six weeks (1-179). The interval between the onset of infection and index debridement by the author was ten months (1-135). Patients had median of 3(0-7) operations before referral.

The median age at operation was 37 years old (7-73). Histopathology confirmed osteomyelitis in all patients. Five patients (15%) had no growth on standard non-extended culture. Five patients (15%) had polymicrobial growth (G+ve and G-ve). 12 patients (36%) had G-ve organisms (*Pseudomonas*, *proteus*, *E-coli*, *Klebsiella* and others). 11 patients (33%) had G+ve organisms (MRSA, MSSA, CONS "MRS" and *Enterococci*).

**Conclusion:** There may be a shift in our region's aetiologies and causative organisms; closed fractures turn into COM postoperatively, several unsuccessful attempts, delayed index debridement and more G-ve organisms. Plans need to be applied to break the cycle and improve outcomes.

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2. Improving the Surgical Teaching Opportunities: A QI Project to Deliver a Course at a Local Hospital Level During COVID-19 Pandemic
3. Rapid systematic review of neonatal COVID-19 including a case of presumed vertical transmission

#### Biography

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