LETTER TO EDITOR (VIEWERS CHOICE)

A RARE CASE OF KINGELLA KINGAE OSTEOMYELITIS OF LEFT FEMUR IN A NEWBORN

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A 3.5kg term female neonate was delivered to 24 yrs old primigravida by emergency cesarean section (for breech with meconiun stained liquor). Baby was well till day 4 of life when she developed high grade fever, lethargy, poor feeding and swelling over left upper third of thigh. She was shifted to neonatal intensive care unit (NICU) and detailed examination revealed unhealthy umbilicus with marked swelling, tenderness and fluctuation of left upper third of thigh with marked restriction of movements at left hip joint. Investigations revealed hemoglobin of 15gm%, white cell count of 34,000/cmm with polymorphs 76% and platelets of 2,80,000/cmm. Peripheral smear showed toxic granules, CRP was 24 mg/dl, ESR 40 mm at end of 1hour. X ray of left femur showed a significant periosteal reaction in the proximal humerus, along with an irregularity at the proximal metaphysis. The umbilical swab and local aspirate grew kingella kingae. She was treated meropenem and vancomycin for 3 weeks and analgesics along with skin traction for 7 days.

Osteoarticular infections, although uncommon, represent a severe condition in neonates. Infections in newborns are largely of an acute nature, transmitted by haematogenous means (1). The osteomyelitic focus is usually found in the metaphysis of a long bone, although infection may spread to the contiguous epiphysis and joint in neonates (1,2). The intracapsular metaphysis of proximal femur and humerus, results in a high risk of concomitant septic arthritis in these joints (3). The most commonly affected joints are the hip joints (31%), knee joints (25%), and ankle joints (18%) (4). Affected neonates usually survive, but with permanent skeletal deformities (5). Etiologically, the most common organisms affecting the joints in the neonatal period are aerobes. The predominant aerobes causing osteomyelitis in children are Staphylococcus aureus, Haemophilus influenzae type-b, Gram-negative enteric bacteria, beta-haemolytic Streptococci, Streptococcus pneumoniae, Bartonella henselae and Borrelia burgdorferi. Anaerobes have rarely been reported as a cause of these infections in children. Many patients with osteomyelitis due to anaerobic bacteria have evidence of anaerobic infection elsewhere in the body, which is the source of the organisms involved in osteomyelitis (6,7). Kingella kingae often colonizes the oropharyngeal and respiratory tracts of children but infrequently causes invasive disease (7). K. kingae is a slow-growing, fastidious, gram-negative microorganism that colonizes mucous membranes of the upper respiratory tract (8). To our knowledge this is the first reported case of Kingella osteomyelitis in early neonatal period from India.

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