

Unusual Presentation of Salmonella Sepsis with Sacroiliac Joint Infective Arthritis

Dr. V. Mathew¹, Dr. Sanjeeva Reddy² & Dr. N. Kannappan³

¹Consultant Physician, ²Consulting Neurologist, ³Consultant Orthopaedic Surgeon, GKNM Hospital

31years old Design Engineer resident of Salem with no co-morbid illness developed sudden onset severe right gluteal pain. Treated locally, symptomatically. Developed shortness of breath and was admitted to Salem GH as Sepsis and MODS. Evaluated Covid negative. MRI SI joint arthritis. CT chest ground glass opacity right lung. Admitted GKNMH 28.06.2020 – At admission deeply icteric, and hypotensive. Blood test – Thrombocytopenia, Creatinine – 1.7, Serum Bilirubin 10.3, Chest x-ray – Features of acute lung injury.

Treated as septic MODS with antibiotics, and inotropes. ECG – Tachycardia, ECHO – Adequate LV function. USG – Bilateral minimal pleural effusion. Considering the possibility of Melioidosis Inj. ceftazidime was added.

He was persistently tachypneic and hence started on NIV. Platelet transfusion is given persistent thrombocytopenia (SDP). He was in persistent respiratory distress with the increased effort of breathing despite NIV, hence electively intubated. Blood culture (4 samples) grew salmonella Typhi. Antibiotics modified based on sensitivity pattern (Ceftriaxone) and added Bactrim DS, also sensitive.

Hepatitis panel (B, C, A & E negative) Progressively improved, inotropes stopped, thrombocytopenia, renal functions and liver function improved as also chest x-ray. Extubated and thereafter shifted to the ward. Continued to have severe right hip pain hence MRI was done. MRI showed features of infective arthritis right SI joint with small loculated collections over iliopsoas and incidental right common iliac and internal iliac vein thrombosis. Started on LMWH. Orthopaedic opinion obtained. Intra op consolidated purulent exudate present. The femoral head articular surface is irregular. Arthrotomy and debridement of the right hip joint were done on 10.07.2020. Intra op specimens A F B and Gene expert negative,

culture no growth. Continued with Ceftriaxone and Bactrim DS considering the possibility of Melioidosis. Progressively improved. Mobilised without weight bearing. CBC, RFT normalised. LFT significantly improved. Discharged on oral antibiotics and OAC. Follow up- remained afebrile, and asymptomatic except for mild local pain.

The case presented due to uncommon presentation as infective arthritis without a preceding history of Enteric fever.

References:

1. Pegues DA, Ohl ME, Miller SI. Mandell, Douglas and Bennett's Principles and Practice of Infectious Diseases. 6th edition. Philadelphia, Pa, USA: Elsevier Churchill Livingstone; 2005. Salmonella species including Salmonella typhi; pp. 2636–2654. [Google Scholar]
2. Agnihotri N, Dhingra MS, Gautam V, Gupta V, Kaushal R, Mehta D. Salmonella Typhi septic arthritis of hip-a case report. Japanese Journal of Infectious Diseases. 2005;58(1):29–30. [PubMed] [Google Scholar]
3. Ulug M, Celen MK, Geyik MF, Hosoglu S, Ayaz C. Sacroiliitis caused by Salmonella typhi. Journal of Infection in Developing Countries. 2009;3(7):564–568. [PubMed] [Google Scholar]
4. Faseela TS, Malli CS, Balakrishna AK, Gomes L, Nayak N. Salmonella typhi septic arthritis of the Hip-a case report. Journal of Clinical and Diagnostic Research. 2010;4(2):2308–2310. [Google Scholar]
5. Olut AI, Avic M, Ozgenc O, et al. Septic arthritis of hip due to Salmonella typhi in a patient with multiple sclerosis. Mikrobiyoloji Bülteni. 2012;46(1):113–116. [PubMed] [Google Scholar]
6. Chen JY, Luo SF, Wu YJJ, Wang CM, Ho HH. Salmonella septic arthritis in systemic lupus erythematosus and other systemic diseases. Clinical Rheumatology. 1998;17(4):282–287. [PubMed] [Google Scholar]
7. Ramos JM, García-Corbeira P, Aguado JM, Alés JM, Fernández-Guerrero ML, Soriano F. Osteoarticular infections by Salmonella no typhi. Enfermedades Infecciosas y Microbiología Clínica. 1995;13(7):406–410. [PubMed] [Google Scholar]
8. Kumari S, Ichhpujani RL. Guidelines on Standard Operating Procedures for Microbiology. New Delhi, India: World Health Organization, Regional Office for South-East Asia; 2000. [Google Scholar]
9. Orban HB, Cristescu V, Dragusanu M. Avascular necrosis of the femoral head. MAEDICA-a Journal of Clinical Medicine. 2009;4(1):26–34. [Google Scholar]