World Academy of Science, Engineering and Technology
International Journal of Medical and Health Sciences
Vol:11, No:04, 2017

Identification and Management of Septic Arthritis of the Untouched Glenohumeral Joint

Authors : Sumit Kanwar, Manisha Chand, Gregory Gilot

Abstract : Background: Septic arthritis of the shoulder has infrequently been discussed. Focus on infection of the untouched shoulder has not heretofore been described. We present four patients with glenohumeral septic arthritis. Methods: Case 1: A 59 year old male with left shoulder pain in the anterior, posterior and superior aspects. Case 2: A 60 year old male with fever, chills, and generalized muscle aches. Case 3: A 70 year old male with right shoulder pain about the anterior and posterior aspects. Case 4: A 55 year old male with global right shoulder pain, swelling, and limited ROM. Results: In case 1, the left shoulder was affected. Physical examination, swelling was notable, there was global tenderness with a painful range of motion (ROM). The lab values indicated an erythrocyte sedimentation rate (ESR) of 96, and a C-reactive protein (CRP) of 304.30. Imaging studies were performed and MRI indicated a high suspicion for an abscess with osteomyelitis of the humeral head. Our second case's left arm was affected. He had swelling, global tenderness and painful ROM. His ESR was 38, CRP was 14.9. X-ray showed severe arthritis. Case 3 differed with the right arm being affected. Again, global tenderness and painful ROM was observed. His ESR was 94, and CRP was 10.6. X-ray displayed an eroded glenoid space. Our fourth case's right shoulder was affected. He had global tenderness and painful, limited ROM. ESR was 108 and CRP was 2.4. X-ray was non-significant. Discussion: Monoarticular septic arthritis of the virgin glenohumeral joint is seldom diagnosed in clinical practice. Common denominators include elevated ESR, painful, limited ROM, and involvement of the dominant arm. The male population is more frequently affected with an average age of 57. Septic arthritis is managed with incision and drainage or needle aspiration of synovial fluid supplemented with 3-6 weeks of intravenous antibiotics. Due to better irrigation and joint visualization, arthroscopy is preferred. Open surgical drainage may be indicated if the above methods fail. Conclusion: If a middle-aged male presents with vague anterior or posterior shoulder pain, elevated inflammatory markers and a low grade fever, an x-ray should be performed. If this displays degenerative joint disease, the complete further workup with advanced imaging, such as an MRI, CT scan, or an ultrasound. If these imaging modalities display anterior space joint effusion with soft tissue involvement, we can suspect septic arthritis of the untouched glenohumeral joint and surgery is indicated.

Keywords : glenohumeral joint, identification, infection, septic arthritis, shoulder
Conference Title : ICEID 2017 : International Conference on Epidemiology and Infectious Diseases
Conference Location : Boston, United States
Conference Dates : April 24-25, 2017