



Case Report

Septic arthritis of left shoulder in pregnancy following minor hand injury

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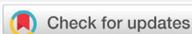
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Summary

Septic arthritis of the shoulder joint is rare and might affect around 3% of the general population [1]. A delay in diagnosis may increase morbidity and lead to bone and cartilage destruction [2]. Septic arthritis is an unusual complication of pregnancy and can progress to permanent arthropathy and disability [3].

Septic arthropathy in pregnancy requires multidisciplinary team involvement for prompt recognition and treatment to improve both maternal and fetal outcomes. High index of suspicion is vital when clinical and laboratory findings suggest septic arthritis. There are multiple predisposing factors reported previously for septic arthritis of the shoulder in pregnancy such as medical conditions, pyelonephritis and trauma. We report a 37 year old lady who presented at 26 weeks gestation with acute left shoulder pain and high temperature following minor left palm trauma. She also had left mastectomy with axillary clearance ten years earlier. She underwent arthroscopic wash out of her left shoulder joint and was covered with antibiotics with rapid improvement and recovery. We reinforce the importance of early multidisciplinary involvement when septic arthritis of the shoulder in pregnancy is suspected especially in women who have had previous mastectomy and axillary clearance which could be a predisposing factor for such a rare and serious joint condition in pregnancy.

Introduction

Septic arthritis in pregnancy is rare and was reported affecting different joints such as the hip and shoulder joints [3,4].

Septic arthritis of the shoulder joint represents an absolute indication for urgent surgical intervention to prevent irreversible local changes and possible mortality and substantial systemic complications such as septicaemia [5]. Early infection can be treated arthroscopically however; late infection would require open surgery [6].

Joint pain is common in pregnancy and is mostly caused by musculoskeletal conditions [7], however; infective arthritis should always be considered as a cause of joint pain [1]. Different predisposing factors for septic arthritis in pregnancy were reported including diabetes, trauma, pyelonephritis, rheumatoid arthritis, intra articular steroid injection, termination of pregnancy and intravenous drug abuse [1]. Only two cases were found in the literature indicating septic arthritis of the shoulder in pregnancy [1,8]. Early diagnosis and joint aspiration are necessary to prevent systemic sepsis which might lead to obstetric complications as sepsis is a common cause of maternal mortality [9].

Case

A 37 year old lady presented to A&E at 26 weeks gestation in her second pregnancy with acute pain of her left shoulder, pyrexia with rigors after sustaining a minor trauma

to her left palm described as splinter. Her relevant past surgical history included left mastectomy and axillary clearance ten years earlier followed by chemotherapy and radiotherapy for multifocal left breast cancer.

She had tachycardia with high temperature. Shoulder examination confirmed red, hot, swollen joint with painful and limited movements. Obstetric examination was unremarkable with a 26 weeks normally grown fetus and normal fetal heart activity. The sepsis pathway was followed. Blood tests indicated significantly raised inflammatory markers with neutrophilia and high CRP. She received intravenous broad spectrum antibiotics of co-amoxiclav (Augmentin) 1.2 gm eight hourly for two days and antipyretics. Orthopaedic opinion was immediately requested and left shoulder arthroscopic washout under regional block was performed and about 40 ml of frank pus was aspirated (Figure 1). Her condition was dramatically improved following this procedure. She was discharged home two days later on oral co-amoxiclav (augmentin) 625 mg three times daily for ten days. Blood and pus cultures with Gram and Crystal examination confirmed gram positive cocci (Staph Hominis) in clumps sensitive to Co-amoxiclav. She was followed up in the orthopaedic clinic with good recovery. Her pregnancy progressed uneventfully and she delivered a healthy baby boy vaginally following a postdate induction of labour at 41 weeks gestation.

Discussion and Conclusion

Previous mastectomy and axillary clearance might predispose to infected shoulder joint later on in life especially during pregnancy where pregnant women are thought to have lower immunity and are susceptible to infection. Hand trauma might have also predisposed this lady to develop septic arthritis in pregnancy. Early clinical suspicion, multidisciplinary team involvement, prompt use of antibiotics and joint aspiration with radical debridement of the infected necrotic tissue and appropriate antibiotic cover have resulted in the quick recovery of this patient's clinical condition and lead to a favorable outcome.

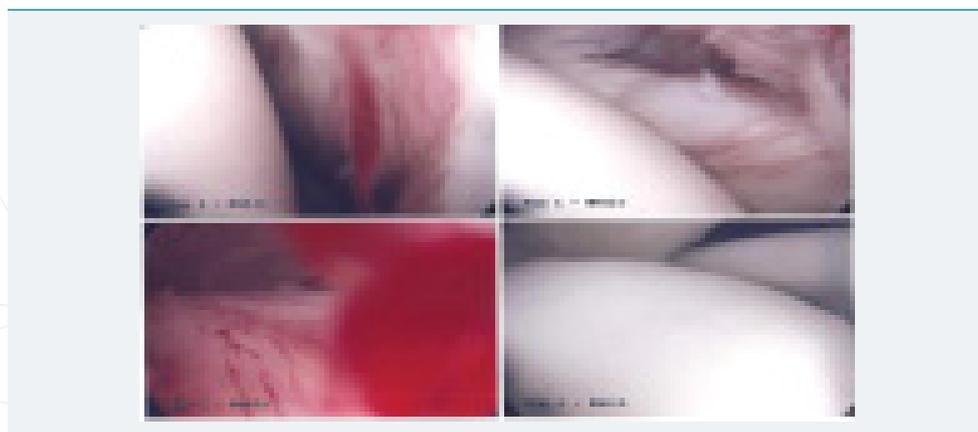


Figure 1: Orthoscopic examination of left shoulder.

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