



CLINICAL IMAGE

Streptococcus Agalactiae: An Unusual Agent of Inguinal Abscess

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Abstract

Streptococcus agalactiae (group B *streptococcus*; GBS) is gram-positive bacterium frequently colonized in pharynx, gastrointestinal and female genital tract. While the microorganism is also responsible for a wide range of infections which include sepsis and meningitis in newborn and chorioamnionitis and urinary tract infection in pregnant women, the incidence of invasive GBS disease has appeared to increase among non-pregnant adults and those with significant underlying conditions in the recent years. The infections of patient with medical illness are a common encountering problem in clinical practice. Individuals with significant medical condition have been increased all over the world. GBS-associated disease should be included in the early differential diagnosis in these patients and particularly inguinal abscesses.

Keywords

Streptococcus agalactiae, Inguinal abscess, Mass

Introduction

Streptococcus agalactiae (group B *streptococcus*; GBS) is gram-positive, β -hemolytic microorganism frequently colonized in pharynx, gastrointestinal and female genital tract [1,2]. The microorganism is also responsible for a wide range of infections which include sepsis and meningitis in newborn and chorioamnionitis and urinary tract infection in pregnant women [3]. These infections cause severe morbidity and mortality in these populations [4]. With prenatal screening and

chemoprophylaxis, the diseases caused by the pathogen have dramatically decreased. However, the incidence of invasive GBS disease has appeared to increase among non-pregnant adults and those with significant underlying conditions in the recent years [1,5]. Here, we report an unusual presentation of this bacterium.

Case Description

45-year-old man was admitted our clinic with complaint of low-grade fever and right inguinal mass and fatigue for ten days. On admission, body temperature was 37.5 °C and pulse was 90/min, this mass was swollen, painful and erythematous and tender to palpation. It was fluctuating. In the medical history, the patient has been alcoholic for 20 years. Laboratory tests were as follows: leukocyte 13000/mm³ (with neutrophilia predominance; 90%), C-reactive protein 20 mg/L (N: 0-5). Screening for HIV and syphilis were negative.

Ultrasound revealed a localized collection of purulent fluid with septations measuring 35 × 14 mm in size and that was consistent with an abscess formation (Figure 1). In the inguinal region, several reactive lymphadenopathies measuring 18 × 7 mm were seen. Subsequently, this collection was drained and cultured. In the gram stain of the aspirated sample, plenty of polymorphonuclear leukocytes and gram-positive bacteria were seen. Cefazolin 3 gr/day was immediately initiated empirically. *Streptococcus agalactiae* isolates were

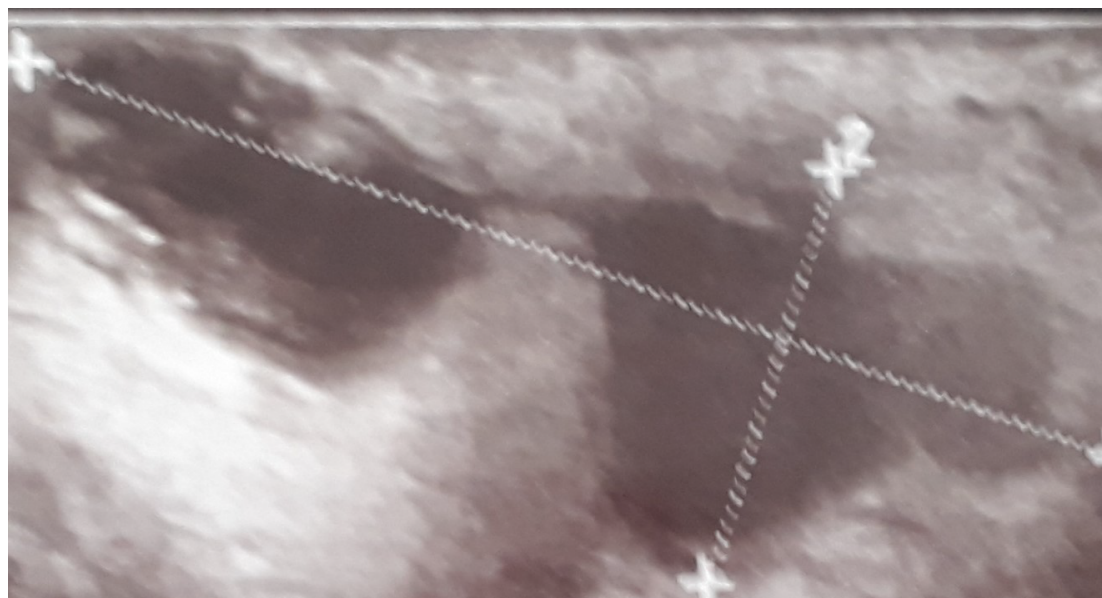


Figure 1: Inguinal abscess with septations on ultrasound.

isolated from the solid and liquid medium culture of the samples. The antibiotic therapy switched to amoxicillin/clavulanate after 3 days of parenteral treatment. He was improved and then the swelling and erythema regressed within one week. The abnormal biochemistry returned to normal ranges. The therapy was continued up to two weeks. On follow-ups, the patient is doing well and with no recurrence.

Streptococcus agalactiae is a very rare cause of infection in humans, other than newborn and pregnant women. A wide range of diseases including diabetes mellitus, malignancy, AIDS, hepatic and renal disease have been recognized as frequent predisposing factors for invasive GBS [6]. According to some studies, alcoholism is another risk factor for these bacterial infections [7]. While GBS-associated skin and soft tissue infections are one of the most common syndromes, inguinal abscess is very rarely reported clinical presentation [6]. As in this case, appropriate antimicrobial therapy combined with surgical intervention is essential for successful management in some cases.

As a conclusion, the infections of patient with medical illness are a common encountering problem in clinical practice. As a result of technological developments in modern treatment approaches, individuals with significant medical condition have been increased all over the world, GBS-associated disease should be included

in the early differential diagnosis in these patients and particularly inguinal abscesses.

Conflict of Interest

None.

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