

Lipschutz ulcer – non-sexual genital ulceration in a 13-year-old female

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Introduction:

Lipschutz ulcer is an acute painful ulcer in young women that is a non-sexually transmitted condition and is usually self-limiting. It is characterised by the rapid onset of painful, necrotic ulcerations of the vulva. The aetiology is unclear, it is thought to be associated with viral illness and is usually a diagnosis of exclusion.

Case Presentation:

A 13-year-old female presents to the emergency department with concerns for painful genital ulcers for the past 24 hours. The patient did not have any significant medical history, no previous surgeries, and was recently commenced on doxycycline for acne. She denied any history of sexual activity.

On physical examination the patient appeared uncomfortable. Examination of the genital area demonstrated four well-defined ulcers with a necrotic centre and an erythematous base with surrounding swelling. There were no signs of vesicles, abnormal vaginal discharge, groin lymphadenopathy, or ulcerations of other mucosal surfaces including the oral cavity.

Routine laboratory investigations were undertaken including a full blood count, comprehensive metabolic panel, and C-reactive protein (CRP) which showed a raised white cell count and CRP with neutrophilia. Chlamydia trachomatis, Neisseria gonorrhoea, Mycoplasma genitalium and a genital swab culture taken were all negative. There was evidence of prior Epstein-Barr virus (EBV) infection (IgG positive, IgM negative) but the remainder of serological tests for herpes simplex virus (HSV), Cytomegalovirus (CMV), Human immunodeficiency virus (HIV) and syphilis were negative and an autoimmune screen was undertaken including ANA, ENA, dsDNA which were negative.

Management:

Lipschutz ulcers are usually managed with supportive therapy including symptomatic relief with topical analgesia. It is typically thought that Lipschutz ulcers resolve spontaneously within weeks to months. The patient was initially managed with oral and topical analgesia including opioids and lignocaine gel however her symptoms progressively worsened during admission and was subsequently commenced on high dose oral prednisolone. She was commenced on intravenous antibiotics to cover for a superimposed bacterial infection. Due to the vulval swelling associated with the ulceration, the patient went into acute urinary retention and required an in-dwelling catheter (IDC) insertion. Despite active treatment with high dose corticosteroids, her pain continued to worsen requiring anaesthetic input and she was commenced on a patient-controlled analgesia (PCA). After oral prednisolone treatment for 6 days there was marked improvement in symptoms and the patient was discharged home on a prednisolone weaning regimen and a course of oral antibiotics. Counselling was provided regarding regular genital hygiene cares and reassurance was given regarding the self-limiting nature of the condition. The patient was followed up by the gynaecology team in the outpatient setting at 6 weeks following initial presentation with complete resolution of her symptoms.

Discussion:

Lipschutz ulcers are a rare, painful vulvar and vaginal ulcers that occur in non-sexually active females, particularly in paediatric and adolescent patients. The ulcers typically present along with viral symptoms including fever, fatigue and joint pain. The aetiology of Lipschutz ulcers remains unclear but there is a theory to suggest that it is a result of a hypersensitivity reaction to either a viral or bacterial infection which subsequently results in the formation of immune complexes in the dermal vessels causing microthrombi that eventually leads to the characteristic painful necrotising ulcers. Given the clinical similarity to sexually transmitted infections, it is essential to exclude infectious aetiologies prior to commencing treatment. Treatment is generally supportive management, focusing on symptomatic relief. It is important to provide education to patients about the self-limiting nature of the condition and discuss the potential risk of recurrence. This case report highlights the importance of considering Lipschutz ulcers in the differential diagnosis of genital ulcers, particularly in patients that are not sexually active.