

Lipschütz ulcer: report and follow-up of a clinical case

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Abstract

Acute genital ulcer, also referred to as “Lipschütz ulcer”, is a relatively uncommon non-sexually transmitted condition characterized by the rapid onset of a necrotic and painful ulcer within the vulvar region. This condition predominantly affects adolescents and young women, irrespective of sexual activity, and may manifest with symptoms resembling those of influenza or mononucleosis. Notably, acute genital ulcers have been linked to Epstein-Barr virus (EBV) infection as well as other viral or bacterial infections; nonetheless, the etiology often remains elusive. The case under consideration involves a 13-year-old girl who, devoid of preceding vaginal or oral ulceration and without a history of sexual contact, presented with a rapidly progressive vulvar ulcer accompanied by episodic low-grade fever and upper respiratory tract infection, commencing two days prior. Following the exclusion of infectious causative factors, the lesion spontaneously resolved, with Epstein-Barr serology yielding indeterminate results, culminating in the diagnosis of Lipschütz ulcer.

Keywords: Lipschütz ulcer, Acute ulcer, Pediatric ulcer, Management acute genital ulcers, Ulcerative vulvar lesions.

INTRODUCTION.

The Austrian Dermatologist Benjamin Lipschütz in 1912 described for first time acute genital ulcers in adolescent non sexually active or any evidence of sexually transmitted infections, in 80% of cases It usually occurs in young girls aged 14–20 years but may occur in children, the incidence is unknown [1]. These ulcers typically appear by an abrupt onset, intense local pain and dysuria, after a nonspecific symptoms like flu-like syndrome. The common sites of ulcer are inner aspect of labia minora, labia majora, introitus, external urethral orifice, or posterior commissure [2]. The ulcers can be single or multiple with raised, sharply demarcated borders. Most of them are often covered with gray exudate or a gray-black eschar, that spontaneously resolve within 2-6 weeks and without recurrences in most cases [3].

The diagnosis is mainly by clinical examination and is made by excluding other usual causes of genital ulceration like infectious causes, non-infection (vulvar neoplasia, trauma, sexual abuse and certain autoimmune pathologies, Although the etiology is not known, “Lipschütz ulcer” diagnosis is established according to five major and one of two minor criteria [3, 4] (Table1).

Table 1

Major Diagnosis Criteria
Presents with first flare of acute genital ulcer
Age <20 years
Absence of sexual contact in the past 3 months
Absence of immunodeficiency
Acute onset of the genital ulcer and healing of within 6 weeks
Minor diagnosis Criteria
Single or multiple Deep, painful ulcers, with a necrotic centre
Bilateral “kissing pattern”

CLINICAL CASE

A 13-year-old patient was taken to the Pediatric Emergency Department due to symptoms compatible with upper respiratory tract infection, as well as gastroenteritis and the presence of fever of >38°C for five days, treated with antipyretics and third-generation cephalosporins.

Subsequently, she went for re-evaluation as she did not present clinical improvement and reported the sudden appearance of a single ulcerous lesion on the left labia minora, which had been evolving for 48 hours, so a consultation was requested with the Gynecology area, where during the interrogation the patient had no significant history and denied being sexually active, ingestion of drugs or other controlled medications, trauma to the injury site, denies previous appearances of similar injuries.

During the Genital examination, a round ulcer with well-defined, violaceous edges measuring 5x4 cm with red granulation tissue was observed, as well as a necrotic eschar on the labia minora that extended to the labia majora and the presence of fibrin (Figure1). Likewise, a grayish-white exudate was observed without presence of bad odor, non-indurated ulcer upon palpation, soft consistency, non-bleeding, no lymph nodes palpable.



An ulcer is observed on the left labia minor measuring 5x4 cm with well-defined edges and a necrotic area on its second day of appearance.

Laboratory tests are performed to exclude other causes of acute ulcerations: HIV, VDRL, Hepatitis B, Hepatitis C, Toxoplasma, Rubeola, Cytomegalovirus, Herpes, Epstein Bar, all of which were found to be negative, secretion culture was requested without the presence of bacterial development in 24 hrs. Biopsy was not done as the patient's mother did not consent.

The patient was treated with topical hydrocortisone and fusidic acid ointment for four weeks and oral anti-inflammatory drugs for five days. (Figs. 2-4) The child showed complete clearance of the lesions in a month without any scars. (Fig. 5-6)



granulation tissue and grayish exudate are observed 20 days after appearance.



Granulation tissue and re-epithelization are observed 25 days after appearance.



An ulcer is observed with well-defined edges, grayish exudate and a necrotic area measuring 2x2 cm on its fifth day of appearance.



Granulation tissue and grayish exudate are observed on the tenth day of appearance.

completely regenerated tissue after 30 days of appearance.

DISCUSSION

Based on data from microbiology, histopathology, serology, and clinical investigations, there is no known etiology for Lipschütz ulcers. The main features of these are painful, necrotic ulcerations in the vulvar area that develop quickly, and they are not sexually transferred. Typically, the ulcerations are deep (more than 1 cm) ^[5], broad, and have well-defined purple borders. The necrotic base is covered in grayish exudate.

Within two to six weeks of the lesions appearing, it spontaneously heals and is most frequently found on the labia minor, however it can also extend to the labia major, perineum, vestibule, and vaginal introitus. With the exception of bigger lesions, scarring sequelae and deformities typically do not arise. Typically, lesions don't come back. Symptoms such as fever, malaise, tonsillitis,odynophagia, adenopathy, myalgia, headaches, and elevated liver transaminases, similar to those of influenza or mononucleosis, may precede it ^[6,7].

Although the pathogenesis is unknown, one theory states that it might result from an immune system hypersensitivity to a bacterial or viral infection, which would deposit immune complexes in the dermal vessels and trigger complementary systems that would cause micro-thrombi to form and tissue necrosis. Six weeks is enough time for full healing without scars. It was stated that the recovery period ranged from 5 to 52 days, with a mean of 16 to 21 days ^[8].

Lipschutz ulcers usually heal on their own and are self-limiting. The major goals of treatment are ulcer healing and pain relief. Antibiotics, topical steroids, and analgesics were therefore used to treat

patients in numerous case reports symptomatically. Furthermore, a short course of systemic corticosteroid treatment ^[9].

In order for patients to obtain timely and proper treatment as well as prognosis advice, it is crucial to recognize Lipschütz ulcers. Idiopathic Lipschütz ulcers account for almost 70% of cases ^[10]. There are no official guidelines for treating Lipschutz ulcers. Thus, further research is required to identify the microorganisms linked to Lipschutz ulcer and the pertinent protocols for diagnosis confirmation.

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