ARTIGO DE REVISÃO

LIPSCHUTZ ULCER: A LITERATURE REVIEW
ÚLCERA DE LIPSCHUTZ: UMA REVISÃO DE LITERATURA

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ABSTRACT
Initially in 1913, Lipschutz described a vulvar ulcer pattern in female adolescents with no history of sexual intercourse associated with a sudden onset, painful vulvar ulceration, and systemic prodromes. Also known as ulcus vulvae actum or acute genital ulcer, it is a reaction to an infection or an inflammation, which can be systemic or localized in a non-vulvar site. The Lipschutz ulcer (LU) is a diagnosis of exclusion and it has numerous differential diagnoses. For example, sexually transmitted infections (STIs), non-venereal diseases, drug reactions, traumatic and neoplastic causes, among others, should be considered. This study aims to review the diagnosis and treatment of LU, since this disease is often underdiagnosed and constitutes an important differential diagnosis of genital ulcers. It is important to remember that this disease has a non-specific prodromic clinical condition, presenting itself with painful ulcers in the genital region, it is not sexually transmitted, it is self-limited and the treatment is focused on analgesia for better patient ease.
Keywords: acute genital ulcer, Lipschutz ulcer, vulvar ulcer.

RESUMO
Inicialmente, em 1913, Lipschutz descreveu um padrão de úlcera vulvar em adolescentes do sexo feminino sem histórico de relações sexuais associadas a um início súbito, ulceração vulvar dolorosa e pródromos sistêmicos. Também conhecida como ulcus vulvae actum ou úlcera genital aguda, é uma reação a uma infecção ou inflamação, que pode ser sistêmica ou localizada em um sítio não vulvar. A úlcera de Lipschutz (UL) é um diagnóstico de exclusão e tem inúmeros diagnósticos diferenciais. Por exemplo, infecções sexualmente transmissíveis (ISTs), doenças não venéreas, reações a drogas, causas traumáticas e neoplásicas, entre outras, devem ser consideradas. Este estudo tem como objetivo revisar o diagnóstico e o tratamento da UL, uma vez que esta doença é frequentemente subdiagnosticada e constitui um importante diagnóstico diferencial de úlceras genitais. É importante lembrar que esta doença possui uma condição clínica prodrômica não específica, apresentando úlceras dolorosas na região genital, não é sexualmente transmitida, é autolimitada e o tratamento é focado na analgesia para um melhor conforto do paciente.
Palavras-chave: Úlcera genital aguda, Úlcera de Lipschutz, Úlcera vulvar.

ACESSO LIVRE

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INTRODUCTION

Initially in 1913, Lipschutz described a vulvar ulcer pattern in female adolescents with no history of sexual intercourse associated with a sudden onset, painful vulvar ulceration, and systemic prodromes[1,2].

Lipschutz ulcer (LU), also known as ulcus vulvae actum or acute genital ulcer, is a reaction to an infection or an inflammation, which can be systemic or localized to a non-vulvar site. It usually occurs in young women with no history of sexual activity. It can also affect children, and it's characterized by painful, benign, and self-limited ulcerations in the vulva region, with systemic symptoms associated, being diagnosed by exclusion[1,3-7].

The numerous possibilities of differential diagnosis make genital ulcers a great challenge to the physician. For example, sexually transmitted infections (STI), non-venereal diseases, drug reactions, traumatic and neoplastic causes, among others, should be considered [1,2,5-12].

This study aims to review the diagnosis and treatment of LU, since this disease is often underdiagnosed and constitutes an important differential diagnosis of genital ulcers.

MATERIALS AND METHODS

In the process of making this literature review, we conducted a research in the following databases: PUBMED, SCIELO, MEDLINE and DIRECT SCIENCE. Key words like "acute genital ulcer", "Lipschutz ulcer" or "vulvar ulcer" were used and 17 relevant articles on this topic were selected. Articles published between 2004 and 2017 in English, Spanish and Portuguese were incorporated for the review. The articles were selected by reading titles, abstracts and publication date.

DISCUSSION

Lipschutz believed that acute genital ulcers were caused by the autoinoculation of lactobacilli. For other researchers it was attributed to the lack of hygiene of young women. Currently, LU is believed to be related to Epstein-Barr virus primo-infection, cytomegalovirus infection or paratyphoid fever [9,13]. Other studies suggest the existence of immunological mechanisms and cellular mediation, being a hypersensitivity reaction to a viral or bacterial infection that occurs with the deposition of immune complexes in the vascularization of the dermis, complement activation, thrombi formation and subsequent tissue necrosis[10]. Despite the previously described theories, pathophysiology remains uncertain due to the scarcity of publications[9].

A retrospective analysis of 110 women with "vulvar ulcer" or "vulvar erosion" (past or present) over a period of five years (March 2009 to March 2014) showed that 33 (30.0%) had a diagnosis of LU as final diagnosis [14].

LU is characterized by a systemic prodromal phase with nonspecific symptomatology generally related to a viral condition such as fever, myalgia, odynophagia, lymphadenopathy, headache and asthenia. The lesions affect the perineum, lower middle third of the vagina and / or vulva, with the labia minora being the most common site. They may be single or multiple, and of a painful nature [2].

The progression of the disease is common and may follow the onset of flu-like symptoms. It is not uncommon to have started using antibiotics, antivirals and immunosuppressants while the diagnosis is being made. With a reliable patient, it is unnecessary to repeatedly question sexual activity if she denied it. When recognized and confirmed as LU, the disease can be treated symptomatically. As a result of the self-limiting nature of the infection, women can be sure that the ulcers will heal completely despite the pain[15].

Three types are described:

1. Gangrenous: single, kissing pattern (bilateral, mirror-image), with irregular margin and necrotic bottom, with resolution in days and may leave a scar. It is the most common form and is usually accompanied by the systemic prodromal phase.
2. Miliar: multiple, small, fibrinous, with shallow bottom and erythematous halo. They heal in a short period and without sequelae. It is not preceded by prodromic symptoms.
3. Chronic: recurrent and infrequent form[5].

The diagnosis of this disease is essentially clinical, since the biopsy does not have specific results. The clinical diagnostic criteria for LU in adolescents and young adults include: age under 20 years old; be the first episode of acute genital ulceration; absence of sexual contact or no history of sexual activity in the previous three months; recent history of systemic influenza or mononucleosis-like disease; presence of multiple painful ulcers, large and deep, with well defined borders and necrotic base of bilateral kiss pattern; acute evolution with sudden onset and spontaneous cicatrization in six weeks[10].

One study described 20 female patients between 10 and 19 years old in which non-sexually transmitted vulvar ulcers developed in the absence of signs of infection. Almost all patients had symptoms such as fever, malaise and headache. Approximately half of the patients also reported upper respiratory tract symptoms. An extensive microbiological evaluation has not shown a primary infectious cause of vulvar ulcers. Complete resolution of ulcers occurred in 21 days in 75% of patients; 7 had recurrence 2 to 16 months after the initial episode. In addition, 10 patients reported episode of an oral aphthous ulcer. With these findings, authors concluded vulvar ulcer in these cases as a complex aphthous manifestation[16].

Epidemiology, anamnesis data and the exclusion of other etiologies should also be considered[7,10]. Among these are STIs such as Syphilis, Herpes Viruses, Human Immunodeficiency Virus (HIV); non-venereal ones such as Epstein-Barr Virus, *Mycoplasma pneumonia*e and Cytomegalovirus; non-infectious causes such as Behçet's disease and inflammatory bowel disease; drug reaction; traumas and neoplasias[10].

Regardless of whether it is classified as a symptom or a distinct clinical entity, it is essential to recognize "ulcus vulvae acutum" as a reactive phenomenon mechanically analogous to erythema multiforme induced by herpes simplex virus. Given the multiple causes of vulvar ulcers, the clinical

evaluation should be guided by the patient's age and the nature of the ulceration (acute, chronic or recurrent). In children, a diagnosis of complex aphthosis is often made based on a history of recurrent oral and genital ulcers in a child with no other comorbidities, on the typical clinical appearance of aphthous ulcers, and excluding infection or trauma. Biopsy is not mandatory[12].

M. pneumoniae is a rare cause of acute genital ulcers in non-sexually active young women. It should be considered a differential diagnosis, especially if the ulcers are accompanied or preceded by respiratory tract symptoms[1].

LU is self-limited, with spontaneous resolution in the first couple weeks, and may persist for up to 45 days. However, because of its painful condition, the treatment consists on medications for symptomatic relief such as oral analgesics and topical anesthetics (lidocaine gel). Other measures include local hygiene with asepsis, topical healing and re-epithelizing products. In addition, there may be a need for antibiotic therapy with doxycycline in cases of gangrenous ulcer. In the presence of a deep, extensive and very painful ulcer, we may use oral or topical corticosteroids for a short period of time with good results[5,10].

The association of genital ulcers with sexual abuse and/or venereal etiology generates emotional and physical stress for the patient and the family. Even if benign and self-limiting ulcers are presented in women who do not have previous sexual contact, it is necessary to exclude sexually transmitted diseases in order to reassure the patient and the family[1].

Still, according to García et al. it is important to keep in mind the possibility of UL as it is often misdiagnosed, even when child abuse is a viable diagnosis according to the first presentation, in order to avoid unnecessary investigations and treatments and anxiety for the family[17].

CONCLUSION

Since the LU is a diagnosis of exclusion and it has numerous differential diagnoses, it can often be underdiagnosed. It is important, therefore, to remember that this disease has a non-specific prodromic clinical condition, presenting itself with painful ulcers in the genital region, it is not sexually transmitted, it is self-limited and the treatment is focused on analgesia for better patient ease.

REFERENCES

1. Koliou MG, Kakourou T, Richter J, Christodoulou C, Soteriades ES. Mycoplasma pneumoniae as a cause of vulvar ulcers in a non-sexually active girl: a case report. Journal of Medical Case Reports. 2017; 11: 187.
2. Kam C Sandra, Salomone B Claudia, Dossi C María Teresa, Tapia E Oscar. Úlcera genital aguda de Lipschütz: caso clínico. Rev. chil. obstet. ginecol. [Internet]. 2014
3. Farhi D, Wendling J, Molinari E, et al. Non-sexually related acute genital ulcers in 13 pubertal girls: A clinical and microbiological study. Arch Dermatol. 2009; 145: 38–45.
4. Halvorsen JA, Breviq T, Aas T, Skar AG, Slevolden EM, Moi H. Genital ulcers as initial manifestation of EpsteinBarr virus infection: two new cases and a review of the literature. Acta Derm Venereol. 2006; 86(5): 439-42.
5. Rubio C Patricia, Baquedano M Laura, Gil A Elisa, Lapresta M María. Úlcera genital aguda en paciente adolescente. Rev. chil. obstet. ginecol. [Internet]. 2012
6. Brinca Ana, Canelas Maria Miguel, Carvalho Maria João, Vieira Ricardo, Figueiredo Américo. Lipschütz ulcer (ulcus vulvae acutum): a rare cause of genital lesion. An. Bras. Dermatol. 2012.
7. Vieira-Barista P., Lima-Silva J., Beires J., Martinez-De-Oliveira J. Lipschutz ulcers: Should we rethink this? An analysis of 33 cases. European Journal of Obstetrics Gynecology and Reproductive Biology 2016; 198: 149-152.
8. José M. Martín, Inmaculada Molina, Dolores Ramón, R.o.s.a. Alpera, Elena de Frutos, Laura García, Vicent Alonso, Esperanza Jordá, Úlceras vulvares agudas de Lipschütz, In Actas Dermo-Sifiliográficas. 2004; 95(4): 224-226.
9. Martínez, F.E; Graells, E.J; Méndez, P.J.R. Úlcera vulvar de Lipschütz: diagnóstico diferencial de la úlcera vulvar en la paciente adolescente. Prog Obstet Ginecol. 2011; 54(7): 368-37
10. Miranda M., Belo N., Almeida T., Mateus A.M., Gomes S., Cruz C. Úlcera de Lipschütz na Adolescência: Um Desafio Diagnóstico. Acta Pediátrica Portuguesa. 2017; 48(1): 85-88.
11. Huppert JS. Lipschutz ulcers: evaluation and management of acute genital ulcers in women. Dermatol Ther 16. 2010; 23: 533–540.
David A. Wetter, MD;1 Alison J. Bruce, MB, ChB;1 Kathy L. MacLaughlin, MD;2 Roy S. Rogers III, MD1.Ulcus Vulvae Acutum in a 13-Year-Old Girl After Influenza A Infection. Skinmed. 2008; 7(2): 95-98.
12. Cheng, S. X., M. S. Chapman, L. J. Margesson, and D. Birenbaum. 2004. Genital ulcers caused by Epstein-Barr virus. J. Am. Acad. Dermatol. 51:824-826.
P. Vieira-Baptista et al. / European Journal of Obstetrics & Gynecology and Reproductive Biology. 2016; 198: 149–152.
13. Wolters et al Lipschu¨tz Ulcers A Rare Diagnosis in Women With Vulvar Ulceration. Obstet Gynecol. 2017; 0: 1–3.
14. Huppert JS, Gerber MA, Deitch HR, et al. Vulvar ulcers in young females: a manifestation of aphthosis. J Pediatr Adolesc Gynecol. 2006; 19: 195–204.
15. J.G. García et al. Lipschütz ulcer: A cause of misdiagnosis when suspecting child abuse. American Journal of Emergency Medicine. 2016; 34: 1326.e1–1326.e2.