Genital Aphthous Ulcers and a Case of Suspected Chikungunya: A Short Clinical Case

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Genital aphthous ulcers can result from multiple conditions including febrile syndromes. Chikungunya infection manifests mainly as fever accompanied by polyarthralgia and pruritic rash. Nevertheless, healthcare providers should be alert to additional presentations. This is the case of a young woman presenting with painful genital ulcers after a three day prodome of fever and polyarthralgia. As a suspected case of Chikungunya infection and a clinical diagnosis of aphthae, treatment with oral prednisone for two weeks produced complete resolution of ulcers with no scarring. It is important to recognize that genital aphthous ulcers can develop in a febrile presentation such as that with Chikungunya. Although sexually transmitted diseases should be ruled out as a more common diagnosis in cases of genital lesions, knowledge about this unusual dermatological presentation would represent not only adequate prompt treatment but will minimize equivocal diagnosis as a sexually transmitted disease. [*P R Health Sci J 2017;36:183-185*]

Key words: Genital Ulcers, Vulvar Ulcers, Genital Aphthous Ulcers, Aphthae, Chikungunya

Aphthous ulcers are extremely common in the oral cavity but infrequent on the genitalia (1). They are probably immune complex related and can be precipitated by infection and other nonspecific febrile conditions (2, 3).

Chikungunya is an emerging infectious disease in Puerto Rico (PR) transmitted by mosquitos from the Aedes family, endemic to the Island. The classic presentation is acute fever with polyarthralgias and myalgias. Atypical manifestations may include neurologic, ocular, cardiovascular, renal and dermatologic (4). This is the case of a young female with an uncommon dermatologic manifestation of Chikungunya: genital aphthous ulcers.

Considering the novel nature of Chikungunya to our community, it is important to be aware of uncommon presentations of this condition. Genital aphthae can be under recognized in this setting. Hence it is imperative to increase knowledge of this condition among healthcare professionals.

Case report

A 27 y/o Hispanic female with a 3 day course of sudden fever and polyarthralgia was clinically diagnosed with suspected Chikungunya. She noticed several tender lesions on the vulva and reported last intercourse one week before the symptoms began. She denied known personal or partner history of sexually transmitted disease and had HIV and VDRL testing one month prior with negative results. No complaints or genital lesions were reported on her partner.

Upon evaluation on day 4, fever had subsided. Cardiovascular, respiratory, neurologic or gastrointestinal symptoms were not reported, only painful hand joints. On physical exam four well demarcated punched out ulcers with a bright red base and yellow fibrin were identified on the vulvar vestibule. Size ranged from 0.5 to 1 cm (Figure 1). No lymphadenopathies, vaginal or extra genital findings were evident. Herpes Simplex Virus (HSV) culture was taken as part of the differential diagnosis.

With a clinical diagnosis of Aphthous Ulcers, the patient was started on Lidocaine 2% jelly for symptomatic relief and Prednisone 40mg x 7 days. Two days later a diffuse maculopapular pruritic rash emerged which was treated with antihistaminic medication. At one week follow up, Herpes culture was negative and lesions had decreased in size or resolved. Prednisone was decreased to 20mg for 7 more days. Two months later, at her well-woman visit, complete resolution of the ulcers with no scarring was evident.

Discussion

Aphthous ulcers are part of the differential diagnosis of vulvar ulcers, whose etiology includes neoplastic, infectious and systemic conditions (5). The cause is unknown but the end result is the development of severe inflammation

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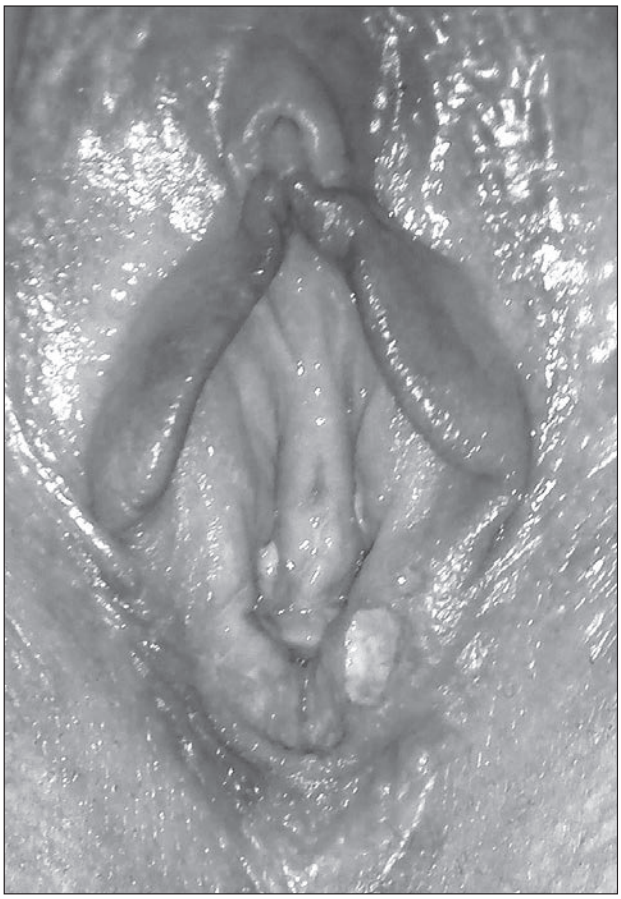

Figure 1. Vulvar aphthous ulcers on day 4 after fever onset.

that leads to vascular destruction, tissue necrosis and ulcer formation (1).

These usually present in young girls and adolescents and are more common in the oral cavity. Within the vulva they are mostly seen in the vestibule, but can also be identified in the labia minora and majora, perineum and vaginal introitus (1). Symptomatology is most likely acute, painful and related to a viral prodrome. Lasting approximately 1-3 weeks and in some cases, can prolong to months, they rarely recur and can cause scarring (1, 2).

The diagnosis is clinical, as there are no characteristic histologic or laboratory abnormalities (1). This is why it is extremely important to have a high index of suspicion whenever encountering genital ulcers in young females. Even though an infectious venereal etiology like HSV, HIV or syphilis is part of the differential diagnosis, common non venereal etiology include Epstein-Barr virus, mycoplasma, streptococcus, influenza, viral upper respiratory tract infection, or gastroenteritis. Neoplastic skin processes like basal cell and squamous cell carcinomas and other conditions like Behçet's, Crohn's and myeloproliferative disease can also present as vulvar ulcers (2, 3, 5).

Management is directed towards symptom control. Topical anesthetics like lidocaine can be used several times a day. Literature review shows that treatment with oral prednisone or methylprednisolone for 7 to 14 days leads to healing in most patients. Alternatives for patients that do not respond include NSAIDs, oral antibiotics, Colchicine or Dapsone (1).

Cases of aphthous genital ulcers have been reported in patients with Chikungunya in countries where it is endemic. After an outbreak in India during 2005-06, several publications linked genital ulcers as manifestations of Chikungunya. In one instance, a group of 16 males ages 20-45 presented with penoscrotal aphthous ulcers after 13 to 35 days from fever onset (6). In a published observation study of cutaneous manifestations of Chikungunya, of 115 cases with dermatologic signs, 27 presented genital aphthous ulcers (26% females) (7). These have been the second most common manifestation after an erythematous maculopapular rash. Other findings include tenderness/edema of hands and feet, hyperpigmented macules over the nose and cheeks, fixed drug eruptions, erythema nodosum, erythema multiforme, generalized urticarial eruptions, and flare up of pre-existing psoriasis and lichen planus (7).

In PR, passive surveillance of Chikungunya was initiated by the CDC and PR Department of Health in January 2014, with the first laboratory confirmed case in May 2014 (8). Although confirmatory testing for Chinkungunya was not performed on this patient, the symptomatology is most consistent with this condition. At the time of the initial evaluation, it was a common scenario to categorize as a suspected case due to the limited availability of laboratories to do the testing. However, it should be noted that when available confirmatory testing should be done with PCR or ELISA.

Considering the recent nature of Chikungunya cases in the Americas, every health care provider should be aware of variations of the disease process. It is understandable to consider sexually transmitted infections when encountering dermal manifestations in the genital area. However not considering a non-venereal etiology could represent a misdiagnosis with potentially serious psychological and legal repercussions especially in underage patients. In addition, it will delay treatment and risk scarring the tissue. Aphthae is a clinical diagnosis that should be included in the differential of genital ulcers in the setting of febrile syndromes.

Resumen

Las aftas genitales pueden resultar de un sinnúmero de condiciones febriles. Chikungunya se caracteriza principalmente por un cuadro febril, poliartralgias y erupción en la piel con escozor. Sin embargo, los proveedores de salud deben estar alertas a presentaciones adicionales de Chikungunya. Este es el caso de una joven mujer que presenta úlceras genitales dolorosas luego de un pródromo de tres días de fiebre y dolor en las articulaciones. Se realiza un diagnóstico de úlceras aftosas genitales con un cuadro sospechoso de Chikungunya y se provee tratamiento con prednisona oral por dos semanas. Al cabo de este término hay resolución total de las úlceras y

sin huellas de cicatrización. Es importante reconocer que las úlceras aftosas genitales pueden surgir en un cuadro febril como es Chikungunya. Aunque las infecciones de transmisión sexual deben ser descartadas como un diagnóstico más común en casos de lesiones genitales, tener conocimiento de esta presentación dermatológica inusual representará tratamiento rápido y adecuado al paciente y minimizará diagnósticos equivocados de infecciones de transmisión sexual.

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