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Undisturbed characteristic herpes simplex virus 2 outbreak

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Abstract

Herpes simplex virus 2 (HSV-2) is a common sexually transmitted disease that typically presents with focal erosions or small vesicles on an erythematous base. Herein, a case is described in which a 42-year old man experienced a genital HSV-2 outbreak after sustaining a spinal cord injury. No typical prodromal symptoms were experienced; therefore the vesicular lesions remained completely intact, granting an unusual opportunity to visualize herpetic infection in its most classic morphology.

Keywords: herpes simplex virus 2, HSV-2, herpetic infection, genital herpes

Introduction

It is estimated that more than 400 million people worldwide are infected with herpes simplex virus 2 (HSV-2), [1]. After primary mucocutaneous infection, HSV travels by retrograde axonal flow to the dorsal root ganglia to establish life long latency [2]. Reactivation of HSV can have prodromal symptoms similar to that of a primary outbreak with localized pain, tenderness, burning, or tingling, but are considered to be milder than the primary outbreak [2]. Recurrence of HSV-2 is approximately four to five times annually after primary infection with decreasing episodes over time [3].

Case Synopsis

A 42-year-old man was admitted after a fall, which caused a T11-T12 fracture dislocation with cord transection resulting in bilateral lower extremity paralysis. Ten days into recovery, blistering developed on the suprapubic region without other associated

symptoms. The patient reported having similar outbreaks in the past, occurring approximately every 6-8 months, associated with burning, tingling, and itching for several days followed by eventual resolution. Physical exam revealed two large clusters of fluid-filled vesicles and bullae on an erythematous base on the mons pubis (**Figure 1**). Tzanck smear was performed and found to be positive for viral elements (**Figure 2**). Herpes simplex virus 2 polymerase chain reaction amplification confirmed the infection.



Figure 1. Clinical photograph of two large clusters of fluctuant bullae on an erythematous base.

Case Discussion

The world population experiences a high burden of HSV-2 infection, with an estimated 400 million individuals affected [1]. This infection manifests with prodromal localized pain, tenderness, burning, and tingling [2]. These symptoms may result in physical manipulation of the vesicles and bullae with subsequent rupture and crusting of the lesions. Given the patient's paraplegic status, associated symptoms were not experienced and the lesions remained

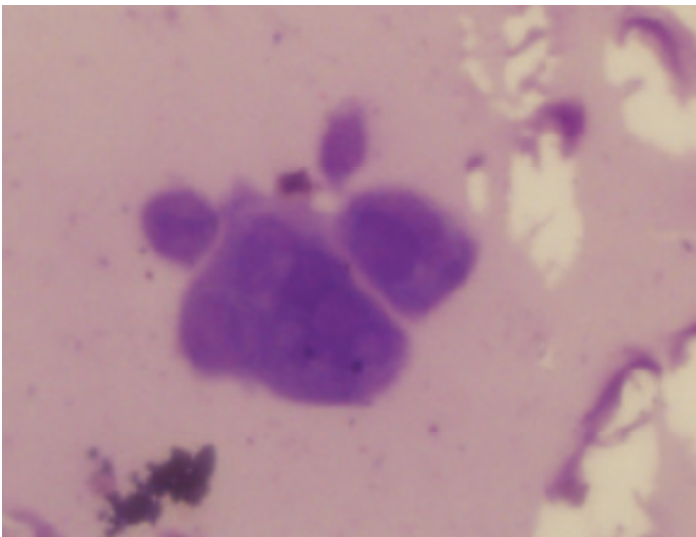


Figure 2. Tzanck smear highlighting multinucleated giant cells with nuclear margination and molding.

undisturbed. This granted an unusual opportunity to visualize the classic clinical morphology of herpetic infection in its full extent.

Treatment goals of herpetic infection are to reduce the severity and duration of symptoms and to prevent transmission [3]. It is important to keep these goals in mind when approaching treatment planning in cases such as this. This patient's paraplegia made the outbreak asymptomatic and his in-patient status puts him at low risk of transmitting the infection to sexual partners.

Conclusion

Prodromal symptoms of recurrent HSV may result in physical manipulations of lesions, making an opportunity to visualize the full extent of an outbreak rare. It remains important to consider goals of treatment before initiation, even in the most common of diseases.

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