

Case Report

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An adolescent patient with perianal herpes as a finding of child abuse: Case report

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Abstract

Herpes Simplex Virus (HSV) type 1 and type 2, is transmitted via sexual or non sexual routes, leading to oral, genital or anal infections. HSV type 1 presents with oral lesions rather than genital lesions in small children. Therefore, in a child with type 1 infection in genital or anal region, the probability of auto-inoculation from oral lesion should be considered. As to genital or anal HSV type 2 infection is transmitted mostly via sexual route, non-sexual auto-inoculation not being described for it. Such infections detected in anal and genital regions in children suggest sexual abuse. The aim of this case report is to present and discuss an adolescent patient with herpetic vesicles in perianal regions who was subjected to sexual abuse.

Keywords: Child Abuse, Perianal Herpes, Herpes Simplex Virus (HSV) Type 2.

Introduction

The diagnosis of sexual abuse is mostly based upon the history told by the child, as evidence of sexually transmitted disease or physical examination with abnormal physical findings is seldom found [1]. In the majority of children subjected to sexual abuse, there are usually no genital or anal injury manifestations unless the child is examined at acute stage [2]. In the literature, it has been reported that of girls who are victims of sexual abuse, including penile penetration to vagina, physical findings of sexual abuse are present only in 5-23% [1]. In a study, it was established, among girls who have been subjected to sexual abuse, the prevalence of diagnostic physical findings was 2.1% in those who were not examined in acute period, while it was 21.4% in those who underwent examination in acute period [2]. In addition, findings of sexually transmitted infections in anogenital region should also suggest abuse [2].

In children, detection of postnatally acquired gonorrhea, syphilis, HIV and chlamydia is considered diagnostic of sexual abuse, while detection of ano-genital herpes, trichomonas and condyloma acuminata is considered suspicious for abuse [3].

Herpes Simplex Viruses (HSV's) are enveloped, double helix DNA viruses with two serotypes. i.e. HSV-1 and HSV-2. HSV-1 infections typically involve lips, mouth, face and skin over waist, but may also lead to genital infections. Infections with HSV-2 involve genital regions and skin areas below lower back in sexually active people [4]. HSV-2 also causes oral lesions in approximately 25% of infected population [5]. In this case report, an adolescent patient with herpetic vesicles in perianal region, who has been subjected to sexual abuse is presented and discussed.

Case report

A seventeen year old girl presented to our emergency clinic

with the complaints of being unable to pass urine for the last two days and pass stool for the last four days. It was learned that the patient was the second living child of non consanguine parents, 36 year old healthy mother and 39 year old healthy father. In physical examination, body weight was 49.2 kg (10-25 percentile), and height 163 cm (50-75 percentile). Globe vesicale and vesicular herpetic lesions in perinal region were present (Figure 1). There was no peroral herpetic lesion and sexual abuse was suspected and when this was questioned, it was learned she was subjected to anal sexual abuse two weeks ago. In physical examination, anal and vaginal laceratio or hyperemia was not detected. Other system examination results were normal. Laboratory investigation results were as follows: hemoglobin: 12.3 g/dL, white cell: 7.100 /mm³, thrombocyte: 312.000 /mm³, CRP (c-reactive protein): 4.4 mg/L Beta HCG (human chorionic gonodotropin): 0.19 negative. Urinalysis results were as follows: ph: 5, density: 1026, nitrite: negatif, erithrocyte: 0, leukocyte: 1. HBsAg test result was: negative, Anti HIV: negative, Anti Hbs: 4.74 negative, Anti HCV: negative, syphilis IgM (immunoglobulin M) and IgG (immunoglobulin G): negative, herpes simplex type 1 IgG: negative, herpes simplex type1 IgM: negative , herpes simplex type 2 IgG: negative, herpes simplex type2 IgM: positive, varicella zoster IgM: negative, varicella zoster IgG: positive and VDRL-RPR: negative. In radiological investigations performed for determining etiology, intestinal folds were found to be filled with gas and stool by abdominal direct graphy in standing position. Pelvic ultrasonography and spinal MR results were established to be normal. The patient was evaluated by pediatric surgery and surgical intervention was not considered. Genital examination as performed by obstetrics and gynecology department and hymen ring was established to be intact. In microscopic examination of vaginal discharge, lactobacillus dominance was found to be lost, few polymorphonuclear leukocytes were observed and clue cell was negative. The patient was evaluated by Child and Adolescent Psychiatry Department and it was determined that stool and urine retention was not of psychological origin and she did not have suicidal ideation and post discharge control visits were recommended. Upon the recommendation of Urology department, patient who had no urinary tract trauma and spontaneous urine output, was followed with placement of catheter, which enabled urine output. Patient was followed with urinary catheter for two days and then, when catheter was withdrawn, spontaneous urine output was observed. Patients was also evaluated by Pediatric Gastroenterology Department and as she could not pass stool and extensive gas and stool was observed in direct abdominal graphy, oral laxative treatment was administered with passage of stool. Dermatology department was also consulted and for herpetic vesicles in perianal region, valacyclovir 2 X 1000 mg peroral and acyclovir cream 2 X 1 treatment was administered for 10 days. After clinical and vital findings became stable, forensic medicine report was preparted and patients was dicharged with the accompaniment of police in order to be evaluated in Children Surveillance Unit.



Figure 1: Herpetic vesicles in perianal region.

Discussion

The presentation of HSV infections varies according to the age of host, immune status, and route of transmission. Muco-cutaneous symptoms of HSV may include: Herpes labialis (lips), gingivostomatit (mouth), eczema herpeticum (eczema areas) and ano-genital herpes [5]. Herpetic lesions are fluid filled blisters and when they are opened, they form ulcers with crust. Herpes lesions are painful and typically resolve within 8-10 days [6]. Genital herpes, is characterized by blisters, ulcers and crust in genital region. HSV lesions may also appear in perianal region or hips and upper thigh. It may lead to symptoms such as dysuria, urinary retention, vaginal or penile discharge, genital itch, burning and tenderness in inguinal region [7]. Perianal herpes was established in our patient who presented to emergency service with complaints of urinary and stool retention.

HSV-1 infection usually stems from direct contact with infected oral secretions or lesions whilst HSV-2 infection is due to direct contact with infected genital secretions or contact with genital lesions during sexual activity [6]. However, oral herpes, may also be derived from oral-genital sexual relation. Genital herpes (HSV-2 or HSV-1) typically indicates sexual contact, (for HSV-2, genital-genital contact and for HSV-1 oral-genital contact) and usually does not emerge prior to the onset of sexual activity [1]. Although oral herpes (HSV-1) transmission via oral-genital contact is theoretically possible, when HSV-1 is established in a pediatric patient, sexual abuse is not primarily suspected. However, when ano-genital herpes is established in a pediatric patient, sexual abuse should always be suspected and taken into account [1].

Ano-genital herpes, arising in the fist four weeks of life is most probably the consequence of vertical transmission from mother to newborn. Ano-genital herpes, which arises after newborn period may be the result of auto-inoculation. Auto-inoculation is a possible form of non-sexual transmission for genital herpes; children with an active oral herpes lesion (HSV-1) touch lesion with their hands and then touch their genitals, hence transmitting virus to their genital organs [5].

When ano-genital herpes is detected in a child, diagnosis should be made with culture and HSV typing of suspicious lesions [5]. In a prepubertal child, diagnosis of ano-genital herpes always suggests probable sexual abuse: Therefore, viral culture will enable the confirmaton of diagnosis for legal purposes. Making differentiation between HSV-1 and HSV-2 may also help

to determine route of transmission [8]. If there is no history of genital abuse in the child and genital examination findings are normal, HSV-1 lesions in genital or anal regions may have been transmitted by auto-inoculation. Nonetheless, auto inoculation probability has not been described in HSV-2 positive lesions. Hence, detection of HSV-2 in ano-genital lesion should make one suspicious of sexual abuse [2]. PCR test, which identifies HSV DNA and can distinguish between HSV-1 and HSV-2 is another method that can be employed in diagnosis. When culture is not available, type specific serological tests may also contribute to the diagnosis of genital herpes [6]. Since there was no oral lesion in our patients who had perianal herpetic lesions, sexual abuse rather than auto-inoculation was considered and serologically was found to be HSV-2 Ig M positive.

Treatment targets of Ano-genital herpes include relieving pain, decreasing the period of viral transmission, inducing recovery, prevention of complications and decreasing the duration of viral transmission [6]. For treatment, viral agents such as acyclovir, valacyclovir, famcyclovir are prescribed. Topical anesthetics, analgesic drugs, sitting baths and wearing loose dresses may help to decrease pain and discomfort [1]. Our patient was administered valacyclovir 2 X 1000 mg peroral and acyclovir cream 2 X 1 for ten days for herpetic vesicles in anal region.

Conclusion

In children, genital herpes occurs seldom. Therefore, in the presence of clinically proven herpetic infection in anal and genital region in children, sexual abuse should always be borne in

mind.

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