CASE REPORT

Primary herpes simplex virus infection mimicking cervical cancer

Andrew Tomkins, Catherine White, Stephen Peter Higgins

Department of Sexual Health,
Pennine Acute Hos NHS Trust,
Manchester, UK

Correspondence to
Dr Andrew Tomkins,
tomkins152@gmail.com

Accepted 5 May 2015

SUMMARY

We report the case of an 18-year-old woman presenting with ulceration of the cervix caused by primary type 2 herpes simplex infection in the absence of skin lesions. The differential diagnosis included cervical cancer and we referred the patient for urgent colposcopy. However, laboratory tests proved the viral aetiology of the cervical ulceration and the cervix had healed completely 3 weeks later. The case highlights the need to consider herpes simplex infection in the differential diagnosis of ulceration of the cervix even when there are no cutaneous signs of herpes.

BACKGROUND

We believe this is the first reported case of primary genital herpes affecting the uterine cervix without cutaneous signs of infection. It is a very unusual presentation of a relatively common infection and emphasises the need to test for herpes simplex even when the clinical presentation is atypical.

CASE PRESENTATION

An 18-year-old British woman presented with a 7-day history of watery vaginal discharge. This had been preceded by an upper respiratory tract infection, general malaise and myalgia. She presented to her general practitioner who had advised her to attend our clinic. She had no history of sexually transmitted infections and had received three doses of bivalent human papilloma virus (HPV) vaccine at school. Four weeks earlier she had started a sexual relationship with a new male partner. Her last sexual contact occurred 2 weeks prior to attending our clinic, when she had unprotected penile–vaginal sex. She had never had cunnilingus with this partner.

On examination, the skin of the anogenital area appeared normal and there was no inguinal lymphadenopathy. Speculum examination revealed a yellow vaginal discharge. There was a large area of sloughy ulceration of the cervix which also showed contact bleeding.

INVESTIGATIONS

Swabs from the cervical ulceration were DNA positive for herpes simplex virus type 2 (HSV2) and DNA negative for both HSV1 and *Treponema pallidum*. Serological tests were negative for IgG for HSV 1 and 2, syphilis and HIV. However, HSV IgM was positive, although this test cannot distinguish between IgM for HSV1 and HSV2. Vaginal vault swabs for chlamydia and gonorrhoea were negative. Convalescent serology performed 22 days after the first clinical visit again proved negative for

syphilis and IgG to HSV1, but IgG for HSV2 was now positive. This seroconversion proved the diagnosis of primary HSV2 infection.

DIFFERENTIAL DIAGNOSIS

HSV (types 1 and 2), syphilis, lymphogranuloma venereum (LGV) and cervical cancer.

TREATMENT

Although HSV infection was considered in the differential diagnosis, no antiviral treatment was given as the clinical findings were so suggestive of cervical carcinoma.

OUTCOME AND FOLLOW-UP

The patient was referred for urgent colposcopy but defaulted follow-up. When she attended our clinic 22 days after her initial visit, the vaginal discharge and all her systemic symptoms had spontaneously resolved. Examination of the anogenital skin was (as at her first visit) normal. A speculum examination showed that the cervical ulceration had completely healed. The patient was counselled about genital herpes with particular attention to the issues of recurrence, viral transmission and future pregnancy. She was given information about herpes support services available. We also advised her to encourage her partner to attend for a sexual health check.

DISCUSSION

The HSVs are the most common cause of genital ulceration seen in the UK.¹ While it has been reported that HSV has been isolated from the cervix in 88% of women presenting with primary genital herpes the cervix is seldom examined in this situation because ulceration around the vaginal introitus usually makes speculum examination too painful.² We believe this to be the first case report of primary herpes simplex infection affecting the cervix in the absence of cutaneous manifestations. The systemic symptoms which preceded the vaginal discharge were clues to the diagnosis, being seen in 67% of primary herpes simplex infection.²

Primary syphilitic chancres of the cervix are rare and although LGV can cause genital ulceration, cases in the UK are mostly found in men who have sex with men. Laboratory tests excluded syphilis and LGV.

The appearance of the cervix at presentation was so suggestive of malignancy that although tests for HSV infection were performed, no antiviral treatment was prescribed. Although rare, cervical cancer does occur in this age group. Between 2009 and 2011, an average of two cases per year were

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To cite: Tomkins A, White C, Higgins SP. *BMJ Case Rep* Published online: [please include Day Month Year] doi:10.1136/bcr-2015-210194

Learning points

- ▶ Herpes simplex is the commonest cause of ulceration in the genital tract.
- ▶ Ulceration of the cervix due to herpes simplex virus (HSV) may, rarely, occur without typical skin lesions.
- ▶ Even when cancer is thought to be high on the list of the differential diagnosis, tests for infectious causes of cervical ulceration such as HSV should be considered.

diagnosed in the UK.³ Although the patient had been vaccinated against infection by HPV 16 and 18, cervical cancer was still a possibility as the bivalent vaccine may offer little or no protection cancer caused by non-vaccine HPV types.

Contributors AT wrote the first draft of the report. CW and SPH amended the first draft.

Competing interests None declared.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

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