ORAL ISOTRETINOIN IN THE TREATMENT OF LARGE BENIGN CONDYLOMA ACUMINATA OF ANOGENITAL AREA – A CASE REPORT

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Abstract

Condyloma acuminata is a gross, exophytic cutaneous lesion most commonly occurring in the anogenital region. It is caused mostly by sexually transmitted human papilloma virus. Genital human papilloma virus infection is the most common sexual transmitted disease worldwide and a leading cause of mortality among young women. Conventional topical therapy is generally ineffective, in large and extensive lesions, whereas a wide and sometimes mutilating surgical excision is necessary in many cases. We aim to present the case of a 26 year-old HIV-negative woman presenting with a four-month history of large benign Condyloma acuminata on the anogenital area, which has been treated successfully with oral isotretinoin without surgery. As a result, low dose oral isotretinoin monotherapy may represent an efficacious, safe, fairly well tolerated, noninvasive and cost effective alternative systemic therapy for anogenital Condyloma acuminata.

Introduction

Condyloma acuminata is a gross, exophytic cutaneous lesion most commonly occurring in the anogenital region. It is caused by sexually transmitted human papilloma virus (HPV). Benign condyloma are usually caused by HPV types 6 and 11, whereas HPV types 16, 18, 31 and 33 are often found in lesions with neoplastic transformation (1). Genital HPV infection is important because of its high incidence and prevalence, but also because of its association with cervical cancer. The latter is the most common malignancy worldwide and a leading cause of mortality among young women (2). Conventional topical therapy is generally ineffective in large and extensive lesions, whereas a wide and sometimes mutilating surgical excision is necessary in many cases.

Case report

A 26 year-old HIV-negative woman presented with a four-month history of Condyloma acuminata on the anogenital area, which had not been treated before. The patient had no history of any internal disease or immunosuppressive medication. In the anogenital region, a soft, verrucous, cauliflower-like shaped, vegetative mass of 16 x 5 cm in diameter was observed (Fig. 1A). There were no palpable regional lymph nodes. There was no evidence of invasion to suggest anal sphincter involvement. The other systems were normal. Routine laboratory tests, including complete blood count, blood chemistry, immunological and serological investigations [tests for hepatitis A, B, C, HIV, herpes simplex virus type 1, 2 (HSV), syphilis, Epstein-Barr virus and Cytomegalovirus] were ne-
HPV type 6 was identified with Polymerase Chain Reaction (PCR). Candida was positive in vaginal discharge with potassium hydroxide (KOH) examination, and fluconazol treatment was given 150 mg once a week for two weeks. Bacteriuria was found in the urine analyses and the urine culture was positive for *E. coli*. Ciprofloxacin was given 500 mg twice daily for a week.

Colposcopy and proctoscopy did not detect any HPV lesions in the genital and gastrointestinal tract. There was no evidence of invasion, dysplasia or malignant transformation on histopathological examination of the biopsy specimen. Histological examination of skin biopsy specimens and clinical features of the lesion established the diagnosis of large benign condyloma acuminatum.

We decided to start a treatment with oral isotretinoin. The patient gave her written consent and received treatment with 0.5 mg/kg/day isotretinoin. No other topical or systemic medication were administered during the treatment period. The patient was advised against pregnancy. Toxicity was monitored on a monthly basis, both clinically and through laboratory tests, which included complete blood counts, renal and hepatic parameters and lipidic profile. Two months after the onset of the treatment there was an impressive regression of the lesions (Fig. 1B) and a complete remission has been achieved after five months of continuous treatment (Fig. 1C).

**Discussion**

Condyloma acuminata is a disease in which HPV is active and shows epithelial overgrowth. It is most commonly seen in the genital, anal, and perianal regions. It has an incidence rate of 0.1% in the general population (3).

The mechanism through which retinoids exert their beneficial effect in HPV infection remains unknown. It has been suggested that retinoids may have some immunomodulatory activity (4). The hallmark of HPV infection is epithelial hyperplasia and retinoids have an endogenous antiproliferative effect. It has been proposed that the retinoids, by altering keratinisation, are able to inhibit viral replication and assembly, which requires keratinocytes in an advanced rate of differentiation (1). An inverse relation was observed between concentration of retinoids and HPV-DNA within infected epithelial cells, suggesting a downregulation of viral replication by retinoids (5). Retinoids have been shown to induce regression of cervical dysplasia as well as to be effective against skin and cervical cancer (6).

Conventional therapies for HPV infection are often associated with unsatisfactory response rates and high recurrence rates. The use of a systemic agent may control the virus more effectively. Some studies regarding isotretinoin monotherapy have shown promising results. Georgala *et al.* reported that 32.1% (9 of 28) of the women treated with isotretinoin achieved complete clearing on
0.5 mg/kg/day (2) and Tsambaos et al. demonstrated a 37.5% (21 of 56) complete clearing rate in men on 1 mg/kg/day (7). In this case, we decided to use oral isotretinoin treatment for several reasons, including high incidence of recurrence, complications, concern of cosmetic results in large lesions after surgery, and cost effectiveness.

In this case, we saw an efficacy with isotretinoin in anogenital Condyloma acuminata. Because of its teratogenic effect, selection of patients for the treatment and strict contraceptive measures are of crucial importance.

In conclusion, low dose oral isotretinoin monotherapy may represent an efficacious, safe, fairly well tolerated, noninvasive and cost effective alternative systemic therapy for anogenital Condyloma acuminata.

Conflicts of interest: none declared.
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Patient consent obtained.

Bibliography