



Case Study

A Rare Association of Human Papilloma Virus- 16 with Condyloma Acuminata

Salil B. Chakrabarti, Maureen P Tigga *

Department of Obstetrics & Gynaecology, Agartala Government Medical College & GB Pant Hospital, Agartala, Tripura, India.

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A B S T R A C T

The association of human papilloma virus- 16 with condyloma acuminata is an unusual occurrence and the virus is considered high risk for carcinogenesis. We report a case of a 22 year lady with giant condyloma acuminata of the vulva who underwent simple vulvectomy and her DNA PCR revealed human papilloma virus- 16.

Keywords: Human papilloma virus- 16, Condyloma acuminata, simple vulvectomy.

1. INTRODUCTION

Condyloma acuminata is the epidermal manifestation attributed to the human papilloma virus (HPV). About 90 % of condyloma acuminata are associated with HPV 6 & 11 which are considered to have the least oncogenic potential. ¹ HPV 16 carries a high risk of carcinogenesis and the occurrence of HPV 16 infection with condyloma acuminata is rare. Presented here is one such case which was treated successfully with simple vulvectomy.

2. CASE REPORT

A 22 year old married woman reported to our outpatient clinic with chief complaints of growth over

Corresponding author *

Dr. Maureen P. Tigga

MBBS, MS, Senior Resident,

Department of Obstetrics & Gynaecology, Agartala Government Medical College & GB Pant Hospital, Agartala, Tripura, India.

E Mail: maurentigga@gmail.com

her vulva which was progressively increasing in size and associated with relentless itching for the past two years. She also had difficulty during coitus due to the growth obscuring her introitus. She had no urinary or bowel complaints. There was no history suggestive of exposure to any allergen or medical disease like thyroid disorder or diabetes mellitus. There was no history suggestive of atopic conditions like asthma, eczema or any sexually transmitted infection. There was no family history of any autoimmune disorder or malignancy. Her husband was examined and found free of any similar lesions.

On examination the patient had pallor, locally a large verrucous growth arising from mons pubis and extending to the lower third of left labia majora and upper third of right labia majora was seen. The urethral meatus and the vaginal introitus were obscured by the growth however these structures were free from it. Per speculum examination was done with difficulty due to the growth and a normal cervix and vagina was seen. On per vaginal examination the uterus was normal sized anteverted with free fornices. The patient had taken dermatological consultation and steroid therapy for six months without any respite in symptoms. Her hemoglobin was 11 gm% and her Papanicolaou smear reported no abnormality. Her VDRL, HBsAg and HIV tests were found to be negative. Biopsy from the lesion reported condyloma acuminata. Looking at the progressive growth of the lesion which was disturbing her coital function, simple vulvectomy was performed. The histopathological report revealed condyloma acuminata without any evidence of malignancy. The DNA PCR of the specimen revealed human papilloma virus 16 (HPV 16). The patient stood the procedure well and had a marked improvement in her quality of life. Currently the patient is on regular follow up and there is no evidence of recurrence and the vulval reconstruction turned out to be satisfactory.

3. DISCUSSION

Condyloma acuminatum results from an epidermotropic DNA virus called the human papilloma virus (HPV). Based on their oncogenic potential HPV types are classified into low- and high-risk types. HPV types 6, 11, 40, 42, 43, 44, 53, 54, 61, 72, 73 and 81 belong to low-risk group and types 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59 and 68 belong to high-risk group².



Fig 1: Giant condyloma acuminata involving the vulva



Fig 2: Post vulvectomy follow up shows satisfactory reconstruction of the vulva with no recurrence

About 90% of genital warts are caused by HPV 6 and 11.¹ Condyloma acuminata is a sexually transmitted disease and is commonly associated with low-risk HPV types 6 and 11. On the other hand HPV-16 is the most commonly found in invasive cancer, CIN 2 and CIN 3 and is responsible for 50% cases of carcinoma cervix^[3]. It is unusual to find the association between HPV-16 with condyloma acuminata. To the best of our knowledge and as per the available literature the association of HPV-16/18 with condyloma acuminatum is extremely rare. Only one case of condyloma acuminata of urinary bladder⁴ was found to be associated with HPV- 16/18, and another case of anogenital condyloma acuminata caused by HPV -16 was reported by Bhageerathy et al.⁵

We report another case of genital condyloma acuminata associated with HPV -16 which is an exceptional occurrence. Simple vulvectomy was performed on our patient who stood the procedure well and till now has not reported any features of recurrence in follow up visits.

Various treatment modalities have been described for condyloma acuminata. Topical agents such as trichloroacetic acid, podophyllin and 5-fluorouracil have been prescribed as therapy.⁶ Cryotherapy, laser vaporisation and electroexcision are other methods of treatment. Intralesional or systemic administration of interferon is another option for recalcitrant lesions.⁶

Simple vulvectomy can be performed in lesions associated with HPV 16 & 18 which carry high risk of carcinogenesis. The verrucous carcinoma of the vulva appears as a large condyloma or lesion suspicious for invasive carcinoma. Such cases should be kept in mind and strict surveillance should be carried out for them. Regular follow-up and annual Pap smear are recommended because cases of relapse and malignant transformation of condyloma have been reported.

On the preventive front, HPV vaccine could lead to a potential reduction in the incidence of genital warts however the quadrivalent vaccine will not prevent all cases of genital wart as seen in the case of cervical cancers.⁷

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