

Giant condyloma acuminatum of the vulva: Successful management with imiquimod



Vanessa Combaud, MD,^a Caroline Verhaeghe, MD,^a Hady El Hachem, MD, MSc,^b
Guillaume Legendre, MD, PhD,^a Philippe Descamps, MD,^a Ludovic Martin, MD, PhD,^c and
Pierre-Emmanuel Bouet, MD, MSc^a
Angers, France, and Beirut, Lebanon

Key words: Buschke-Löwenstein tumor; giant condyloma acuminatum; imiquimod; vulva.

INTRODUCTION

Giant condyloma acuminata (GCA) is a large condyloma of the anogenital region with a cauliflower-like appearance. The tumor is extremely rare and is related to human papilloma virus (HPV) infection (HPV type 6 and 11 in 90% of cases).¹ The definitive treatment is wide surgical excision, but topical medical treatment can be effective in selected cases.^{2,3} Here we report the first case, to our knowledge, of complete regression of vulvar GCA after treatment with topical imiquimod (5% cream) therapy, with no recurrence reported over a 3-year follow-up period. Signed informed consent was obtained from the patient.

CASE REPORT

A 21-year-old woman presented with severe perineal pain, dysuria, and burning micturition. For the past 2 months, she complained of vulvar pruritus and burning and recently had vulvar edema. The patient had not received any prior HPV vaccination.

Physical examination found a large exophytic cauliflower-like vulvar tumor, measuring 15 × 11 × 7 cm, involving both labia majora, extending anteriorly to mons pubis and posteriorly to the perineum (Fig 1). Biopsy results of the lesion confirmed that it was a giant condyloma acuminatum without evidence of malignant disease (Fig 2). The tumor was positive for HPV 6 and 11. Workup included a pap smear, a pelvic magnetic resonance imaging and HIV serology. Results of these tests were negative.

Abbreviations used:

GCA: giant condyloma acuminatum
HPV: human papilloma virus

Even though surgical excision is the treatment of choice for giant condyloma acuminatum, we decided to begin treatment with topical imiquimod (imiquimod cream 5%, applied once a day and left for 12 hours) because of the size, location, and extension of the lesion, and the risk of vulvar scarring and distortion after surgery. The treatment was overall well tolerated with no major side effects reported; the patient only complained of pain in the vulvar area, which was treated with oral morphine, and local irritation in the adjacent healthy vulvar tissue successfully treated with aloplastine cream.

A clear regression of the lesions was noted after 2 months of treatment (Fig 3) along with an improvement of symptoms. The lesions and symptoms completely disappeared after 6 months of treatment (Fig 4). No recurrence was reported during a 3-year follow-up period.

DISCUSSION

GCA is a sexually transmitted disease caused by HPV infection, with a very low incidence in the general population (0.1%) and a male-to-female ratio of 2.7:1.³ GCA is characterized by a high recurrence rate (30%-70%) after treatment and a risk of

From the Departments of Obstetrics and Gynecology^a and Dermatology,^c Angers University Hospital and the Department of Obstetrics and Gynecology, Clemenceau Medical Center.^b

Funding sources: None.

Conflicts of interest: None disclosed.

Correspondence to: Caroline Verhaeghe, MD, Department of Obstetrics and Gynecology, Angers University Hospital, 4 rue Larrey, 49000 Angers, France. E-mail: Verhaeghe.caroline@gmail.com.

JAAD Case Reports 2018;4:692-4.

2352-5126

© 2018 by the American Academy of Dermatology, Inc. Published by Elsevier, Inc. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

<https://doi.org/10.1016/j.jidcr.2018.04.007>



Fig 1. GCA of the vulva upon presentation.

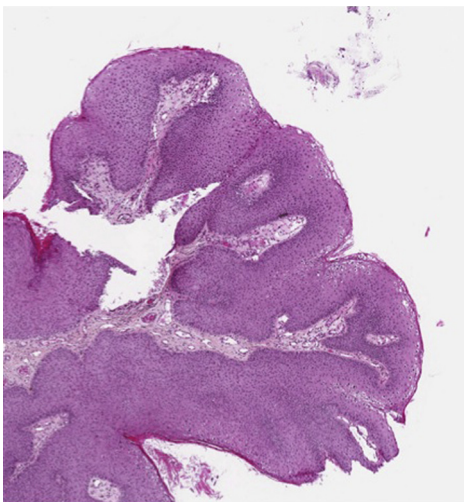


Fig 2. Pathology of a papillary condyloma acuminatum. There is acanthosis, koilocytosis, parakeratosis, and no signs of invasion or dysplasia. (Hematoxylin-eosin stain; original magnification: $\times 4$.)

malignant transformation to squamous cell carcinoma.² However, because of the rarity of the disease, there are no guidelines on the optimal management. Wide surgical excision is considered the treatment of choice. This method allows for pathologic examination of the entire tumor to rule out invasive disease and confirm the tumor-free resection margins.^{3,4} Moreover, it significantly decreases the risk of recurrence.⁴ Its main drawback is the resultant skin



Fig 3. Partial regression after 2 months of imiquimod treatment.



Fig 4. Complete regression after 6 months of imiquimod treatment.

and tissue scarring and defects that might be significant in cases of very large tumors, leading to functional and esthetic sequelae and requiring extensive reconstructive surgery.^{3,5}

Many topical and systemic treatments have been used, either alone when surgery is contraindicated and for recurrences or as adjuvants. These treatments include chemotherapy (podophyllin, 5 fluorouracil,

bleomycin, methotrexate), radiotherapy, immunotherapy (intralesional injections of interferon), laser ablation, cryosurgery, and electrocoagulation.⁵

Topical imiquimod, an aminoquinolone immune response modifier, has also been proposed as an alternative therapy, with the first case of complete regression of a perineal GCA published in 2003. The patient was an 82-year-old woman with contraindications to surgery because of her general health status. Imiquimod led to a partial tumor regression, and the residual tumor was treated with 2 sessions of carbon dioxide laser.⁶ Several case reports later described the use of topical imiquimod in association with other treatments for GCA.³

The choice of treatment should be discussed between the treating physicians (gynecologist, dermatologist) and the patient. Many factors must be taken into account, such as the anatomic location of the lesions, the size and thickness, the general health and immunologic status of the patient, and the cost and availability. Patients should also be informed of the advantages and side effects of each treatment. For instance, imiquimod treatment can be offered to a young and compliant patient to avoid an aggressive surgery, but she should be counseled about the severe vulvo-perineal pain sometimes associated with the medication. After regression of the lesion, close monitoring is required to rule out

relapse and malignant transformation to squamous cell carcinoma.⁷

To our knowledge, this is the first reported case of complete regression of giant condyloma acuminatum of the vulva achieved with topical imiquimod treatment only, with no recurrence over 3 years of follow-up.

REFERENCES

1. Bambao C, Nofech-Mozes S, Shier M. Giant condyloma versus verrucous carcinoma: a case report. *J Low Genit Tract Dis.* 2010; 14:230-233.
2. Jablonska S. Traditional therapies for the treatment of condylomata acuminata (genital warts). *Austr J Dermatol.* 1998;39:52-54.
3. Niazy F, Rostami J, Motabar AR. Giant condyloma acuminatum of vulva frustrating treatment challenge. *World J Plast Surg.* 2015;4:159-162.
4. Tripoli M, Cordova A, Maggi F, Moschella F. Giant condylomata (Buschke-Löwenstein tumours): our case load in surgical treatment and review of the current therapies. *Eur Rev Med Pharmacol Sci.* 2012;16:747-751.
5. Mittal P, Prakash V, Gupta R, Dewan R, Singhal S, Suri J. Giant condyloma acuminatum of vulva treated by surgical excision and reconstruction defect. *Arch Gynecol Obstet.* 2013;287: 1047-1048.
6. Heinzerling LM, Kempf W, Kamarashev J, Hafner J, Nestle FO. Treatment of verrucous carcinoma with imiquimod and CO2 laser ablation. *Dermatology.* 2003;207:119-122.
7. Creasman C, Haas PA, Fox TA Jr, Balazs M. Malignant transformation of anorectal giant condyloma acuminatum (Buschke-Loewenstein tumor). *Dis Colon Rectum.* 1989;32:481-487.