

Surgical Treatment of a Severe Anogenital Condyloma Acuminata – Case Report

Kolani Henri^{1*} Xhelili Eljona² Vila Frenki³ Haxhiu Asfloral⁴ Masati Bledi⁵ Braholli Eriol⁶
Çili Manser⁷ Osmënaj Renato⁸ Kananaj Ervin⁹ Prendi Urana¹⁰ Qosja Entela¹¹
Taçi Stela¹² Thomanasto Aleksandër¹³ Prendi Kristian¹⁴ Sula Arentin¹⁵

1. Associate Professor, General Surgeon, “Mother Teresa” University Hospital, Tirana, Albania

2. General Surgeon, Kukës Regional Hospital, Kukës, Albania

3. General Surgeon, Memorial Hospital, Fier, Albania

4. General Surgeon, Lushnje County Hospital, Lushnje, Albania

5. General Surgeon, University Trauma Hospital, Tirana, Albania

* E-mail of the corresponding author: henri.kolani@yahoo.com

Abstract

Background

Condyloma acuminata is a medical condition caused by human papillomavirus (HPV). It is manifested in the form of warts of the anogenital region. HPV is one of the most common sexually transmitted diseases. Other factors that increase condyloma prevalence are the number of lifetime sexual partners, chlamydia and gonorrhoea infections, HIV and smoking. Lesions appear as skin-coloured papules which can be pedunculated, flat or in severe cases take a cauliflower shape. An advanced condyloma acuminata may transform into Buschke-Lowenstein tumour, a large mass that occupies the entire anogenital area. Among other medical options, surgical excision is the only treatment with close to 0% recurrence rates.

Case presentation

A 63 years old female patient presents to the surgical consult clinic with the complaint of a gigantic anogenital lesion which occludes the anal canal and vaginal orifice. The lesion causes pruritus, pain and difficulty in passing stool. She refers performing a surgical procedure for the excision of anogenital warts 8 years prior, in a hospital of a foreign country. The mass has grown vastly, hindering normal daily activity. After obtaining patient consent a radical surgical procedure is performed, with the extirpation of the whole vagino-perianal condyloma.

Discussion

Condyloma acuminata remains a serious disorder that, if caught early, has a variety of therapeutic options. In most extreme cases abdominoperineal resection becomes the only option left after malignant transformation as a result of delayed diagnosis. We recommend an aggressive surgical approach to treat advanced ano-genital condyloma acuminata to prevent recurrence and possible malign transformation.

Conclusion

Condyloma acuminata is a complex and difficult to treat condition. Doctors should inform patients upon the diagnosis of condyloma for the route of transmission, safe sexual behaviour, which includes utilizing barrier protection, avoiding anal intercourse and having multiple partners. They should be advised to inform partners of their diagnosis. Surgical resection is the only treatment option with almost 0% recurrence rates. Patients with large lesions, recurrent condyloma or ineffective medical treatment should be referred to a specialist for surgical removal.

Keywords: General Surgery, Condyloma Acuminata, Anogenital Wart, Buschke-Lowenstein Tumor, HPV

DOI: 10.7176/JEP/14-16-01

Publication date: June 30th 2023

1. Introduction

Condyloma acuminata is a medical condition caused by human papillomavirus (HPV). It is manifested in the form of warts of the anogenital region. HPV is one of the most common sexually transmitted diseases. Other factors that increase condyloma prevalence are the number of lifetime sexual partners, chlamydia and gonorrhoea infections, HIV and smoking.

Clinically patients are asymptomatic, though pain, bleeding and itching may be present. Mostly patients are distressed about the appearance of the lesions. Generally, lesions are in multiples and join into a larger one. Condyloma lesions appear as skin-coloured papules which can be pedunculated, flat or in severe cases take a cauliflower shape. An advanced condyloma acuminata may transform into Buschke-Lowenstein tumour, a large mass that occupies the entire anogenital area.

Condyloma acuminata usually takes three months to form after an incubation period of several months up to two years. Young and healthy individuals will heal the infection over time, so it is advised the treatment is delayed up to two years of persisting lesions.

There are many medical treatment options such as cryotherapy, podophyllotoxin solution, imiquimod cream,

trichloroacetic acid or 5-aminolevulinic acid. However surgical excision is the only treatment with close to 0% recurrence rates.

2. Case presentation

2.1 History of present illness

Our patient is a 63 years old female with the following medical history and presentation:

The female patient presents to the surgical consult clinic with the complaint of a gigantic anogenital lesion which occludes the anal canal and vaginal orifice. The lesion causes pruritus, pain and difficulty in passing stool.

She refers performing a surgical procedure for the excision of anogenital warts 8 years prior, in a hospital of a foreign country. The mass has grown vastly, hindering normal daily activity.

2.2 Details of the surgical procedure

The procedure is performed under general anaesthesia. The patient is placed in the lithotomy position. A urinary catheter is also placed. We evidence a giant vaginal condyloma which usurps both the labia majora and extends towards the perianal area, also obstructing the outer part of anus, not its mucosa. It extends until the coccygeal region.

We begin with the pubic part. The skin is incised along with the extirpation of this cutaneous part where condyloma was present, resecting the labia majora vaginalis. Next, we proceed with the resection of the perianal part, preserving the anal sphincter muscle.

An incision of the whole perineum where the condyloma was rooted is made, followed by sequentially implanting the anal mucosa in healthy skin.

After implanting the anus, we continue resecting the condyloma mass up to the coccygeal region. Then the vaginal mucosa is also implanted in healthy skin tissue, thus ending the procedure for extirpation of the whole vagino-perianal condyloma.

2.3 Post-operative period

The patient tolerated the procedure well, with uneventful post-operative course. She was discharged in good health.



Figure 1. Gigantic, advanced ano-genital condyloma acuminata (pre-operative).

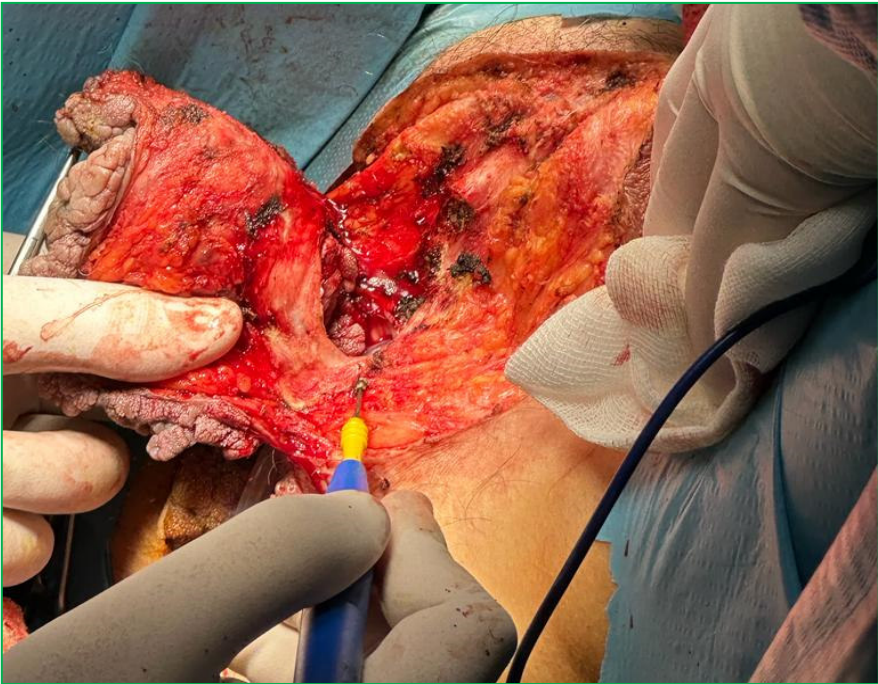


Figure 2. Extirpation of the pubic part of condyloma, along with the labia majora.



Figure 3. Resection of the labia majora.

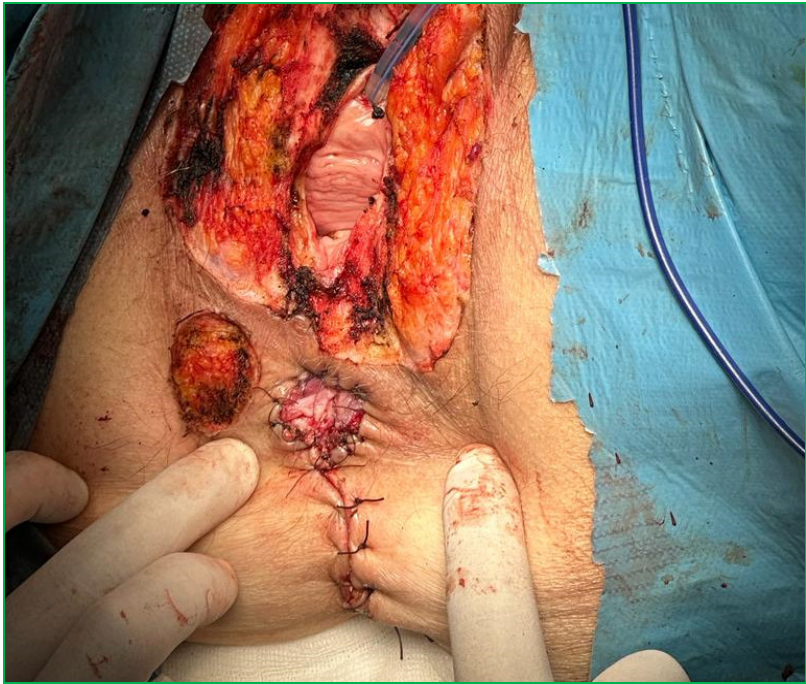


Figure 4. Resection of the perianal and coccygeal part. Implanting the anus mucosa in healthy skin.

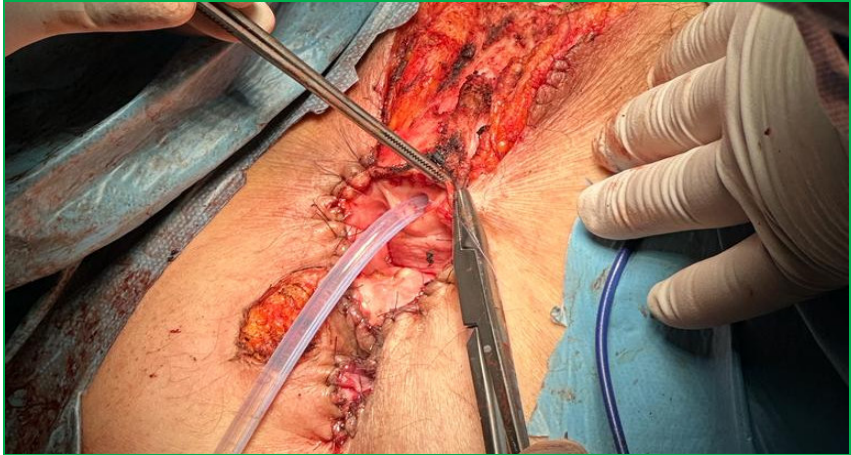


Figure 5. Implanting the vaginal mucosa in healthy skin.



Figure 6. End result of the extirpation of vagino-perianal condyloma.

3. Discussion

Condyloma acuminata remains a serious disorder that, if caught early, has a variety of therapeutic options. In most extreme cases abdominoperineal resection becomes the only option left after malignant transformation as a result of delayed diagnosis.

The patient had already performed a resection surgery 8 years prior to the current events. Now the condyloma lesion has advanced locally from the pubic region to the coccyx, including the vaginal and anal orifices, without invading the anal mucosa.

A healthy anal mucosa permitted the execution of the surgical procedure as explained above.

The patient presenting with such an advanced stage was completed with other imaging diagnostic tools such as CT, to measure the extent and infiltration of other tissues.

We recommend an aggressive surgical approach to treat advanced ano-genital condyloma acuminata to prevent recurrence and possible malign transformation.

4. Conclusion

Condyloma acuminata is a complex and difficult to treat condition. Doctors should inform patients upon the diagnosis of condyloma for the route of transmission, safe sexual behaviour, which includes utilizing barrier protection, avoiding anal intercourse and having multiple partners. They should be advised to inform partners of their diagnosis.

Many non-invasive treatment options are available, but have varying possibility for recurrence. Patients should be checked on regularly with periodic appointments.

Surgical resection is the only treatment option with almost 0% recurrence rates. Patients with large lesions, recurrent condyloma or ineffective medical treatment should be referred to a specialist for surgical removal.

Conflict of interest

The author(s) declare(s) that there is no conflict of interest. The authors alone are responsible for the content and

writing of the paper.

Financial disclosure

There is no financial support to this study.

Ethical aspect

Informed consent was obtained from all participants in the study and all procedures were conducted in accordance with the Declaration of Helsinki.

References

1. Pennycook KB, McCready TA. Condyloma Acuminata. [Updated 2022 Aug 1]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK547667/>
2. Kaderli R, Schnüriger B, Brügger LE. The impact of smoking on HPV infection and the development of anogenital warts. *Int J Colorectal Dis.* 2014 Aug;29(8):899-908. doi: 10.1007/s00384-014-1922-y. Epub 2014 Jun 17. PMID: 24935346.
3. O'Mahony C, Gomberg M, Skerlev M, Alraddadi A, de Las Heras-Alonso ME, Majewski S, Nicolaidou E, Serdaroğlu S, Kutlubay Z, Tawara M, Stary A, Al Hammadi A, Cusini M. Position statement for the diagnosis and management of anogenital warts. *J Eur Acad Dermatol Venereol.* 2019 Jun;33(6):1006-1019. doi: 10.1111/jdv.15570. Epub 2019 Apr 10. PMID: 30968980; PMCID: PMC6593709.
4. Park IU, Introcaso C, Dunne EF. Human Papillomavirus and Genital Warts: A Review of the Evidence for the 2015 Centers for Disease Control and Prevention Sexually Transmitted Diseases Treatment Guidelines. *Clin Infect Dis.* 2015 Dec 15;61 Suppl 8:S849-55. doi: 10.1093/cid/civ813. PMID: 26602622.
5. Sporkert M, Rübber A. Buschke-Löwenstein-Tumor [Buschke-Löwenstein tumors]. *Hautarzt.* 2017 Mar;68(3):199-203. German. doi: 10.1007/s00105-016-3924-x. PMID: 28074214.
6. Niederauer HH, Weindorf N, Schultz-Ehrenburg U. Ein Fall von Condyloma acuminatum giganteum. Zur Differentialdiagnose der Riesenkondylome von den Buschke-Löwenstein-Tumoren und dem verrukösen Karzinom [A case of giant condyloma acuminatum. On differential diagnosis of giant condylomas from Buschke-Löwenstein tumors and verrucous carcinoma]. *Hautarzt.* 1993 Dec;44(12):795-9. German. PMID: 8113045.
7. Uth Ovesen A. Perianal Buschke-Löwensteins tumor [Perianal Buschke-Löwenstein tumour]. *Ugeskr Laeger.* 2012 Jun 4;174(23):1616-7. Danish. PMID: 22673386.
8. Bambao C, Nofech-Mozes S, Shier M. Giant condyloma versus verrucous carcinoma: a case report. *J Low Genit Tract Dis.* 2010 Jul;14(3):230-3. doi: 10.1097/LGT.0b013e3181c945ed. PMID: 20592560.
9. Ghaemmaghami F, Nazari Z. Giant condyloma acuminatum mimicking vulvar verrucous carcinoma. *Eur J Surg Oncol.* 2007 Jun;33(5):668-9. doi: 10.1016/j.ejso.2006.09.031. Epub 2006 Nov 13. PMID: 17097849.
10. Mayeaux EJ Jr, Harper MB, Barksdale W, Pope JB. Noncervical human papillomavirus genital infections. *Am Fam Physician.* 1995 Sep 15;52(4):1137-46, 1149-50. PMID: 7668205.
11. Kling AR. Genital warts--therapy. *Semin Dermatol.* 1992 Sep;11(3):247-55. PMID: 1327058.