

Condylomata Acuminata of the Penis and Scrotum Case Report and Literature Review

Otei Otei O. O, Ozinko M, Ekpo R, Egiehiokhin Isiwere, Nabie N.F

Abstract— The case of an affected 36-year old male and review of relevant literature which utilize to highlight the diagnostic and management challenges of this case. The patient was initially received medical treatment at the Dermatology Clinic of the University Calabar. The latter was not successful and the patient was referred to the Burns and Plastic Surgery Unit of the same hospital where scrotal sac excision, flap cover and electrocautery were done. This treatment was successful but there was mild penile contracture and we intend to follow up patient closely for early detection and treatment of recurrence.

BACKGROUND

Condylomata Acuminata or genital wart refers to the epidermal manifestation attributed to the epidermotropic Human Papilloma Virus (HPV) particularly types 6 and 11 . They are usually asymptomatic , its infection is lifelong and can recur anytime at any anatomical site.

Index Terms— Condylomata acuminata, surgical excision,scrotoplasty.

I. INTRODUCTION

Highlight Condylomata acuminata or genital warts usually are caused by HPV. HPV infections of the genital tract are the most common sexually transmitted viral infections in the United States. Genital warts are usually asymptomatic and can be found most commonly at the introitus in women, under the foreskin of the uncircumcised penis, and on the shaft of the circumcised penis. It occurs at multiple sites in the anogenital epithelium or within the anogenital tract (eg vagina, cervix, perineal skin, scrotum etc).

An important part of management is helping the patient to understand that the infection is lifelong and can recur any time at any anatomical site.

We report a 36 year old male who was referred to the Surgical outpatient Department of the University of Calabar Teaching Hospital, Calabar from the Dermatology Clinic of

same Hospital with a histological diagnosis of Condylomata Acuminata following a history of multiple scrotal and penile swellings of 10 year duration and the challenges faced in the management of the condition.

CASE REPORT

A 36 year old married Driver was referred from dermatology clinic to the Surgical outpatient Department of the University of Calabar Teaching Hospital, Calabar with a histological diagnosis of Condylomata Acuminata of the Penis and Scrotum following a history of multiple peno-scrotal swellings of 10 years duration.

A swelling was first noticed as a hard painful boil on his left inguinal region . Multiple swellings appeared in the same region and subsequently spread to the right inguinal region. The swellings broke down discharged pus, the area became hard and developed into open small sores which coalesced into two bigger wounds in the inguinal regions. Subsequently, multiple rashes appeared on the scrotum which gradually increased in size with swelling of the affected area. Swelling was not painful, however there was occasional discharge of clear fluid from the wound. There was a history of reduced libido and a positive history of multiple sexual partners. There was no associated fever, difficulty in urination, change in urine colour or volume, no itching , no previous history of sexually transmitted infections, no steroid use and he is not a retroviral positive patient.

Following the above complaints, patient visited a patent medicine shop where he received Ampiclox and Chymoral. He had temporary relieve of pains but the swellings persisted. Upon recurrence of severe pains , patient presented at the University of Calabar Teaching Hospital where he was reviewed and some investigations were requested but patient was however lost to follow-up and proceeded to a herbalist where he was given herbal mixtures. Symptoms progressively worsened despite regular intake of the oral and topical herbal mixtures and this necessitated the patient's return to General Out Patient Department of the University of Calabar Teaching Hospital from where he was referred to the Dermatology clinic . He was thereafter reviewed and a histological diagnosis of Condylomata Acuminata was made and he was placed on Podophyllin, Trichloroacetic acid, 5-Fluorouracil and Epinephrine gel at various intervals. There was however no significant resolution of symptoms after some months and therefore he was referred to the Burns and Plastics Unit of the University of Calabar Teaching Hospital . There was no previous surgery, no blood transfusion, no chronic illnesses and no known drug allergies.

Otei Otei O. O, Division of Plastic Surgery, Department of Surgery University of Calabar Teaching Hospital, Calabar Cross River State, Nigeria.

Ozinko M, Division of Plastic Surgery, Department of Surgery. University of Calabar Teaching Hospital, Calabar Cross River State, Nigeria.

Ekpo R, Division of Plastic Surgery, Department of Surgery. University of Calabar Teaching Hospital, Calabar Cross River State, Nigeria.

Egiehiokhin Isiwere, Division of Plastic Surgery, Department of Surgery. University of Calabar Teaching Hospital, Calabar Cross River State, Nigeria

Nabie N.F, Division of Plastic Surgery, Department of Surgery. University of Calabar Teaching Hospital, Calabar Cross River State, Nigeria

Patient is married for 3 years but yet to have a child .He took alcohol occasionally but has stopped for some months before presentation and does not take tobacco in any form.

Review of systems was essentially normal.

Physical examination, we found a young man, calm, afebrile,not pale, anicteric, acyanosed, not dehydrated and no pedal oedema. The vital signs were normal .Abdomen was full, moves with respiration, soft, no organomegal. The groin showed multiple discrete dyschromic nodules and plaques on the entire scrotum, root and shaft of the penis(fig.1.) Rectal examination was normal.



Fig. 1. Multiple dyschromic nodules on the scrotum, penis and pubis.

Investigations carried out include include Full blood count:PCV - 38% ,Total WBC – 2.5x10⁹

**,Differentials: Neutrophill - 70% ,Lymphocyte - 30%.
FBS - 5.2mmol/L ,retroviral screening - Non reactive,
Urinalysis – Normal,VDRL- Non reactive .**

At surgery he was offered an extensive surgical excision of the Scrotal lesion and medial thigh fasciocutaneous scrotoplasty with Electrocautry of the penile lesions. Intraoperatively,the testicular structures were normal and preserved. Histology Report of specimen (scrotal sac) Confirmed the diagnosis of Condylomata acuminata . Patient had satisfactory post operative period and was discharged to out patient follow-up on the 14th post operative day

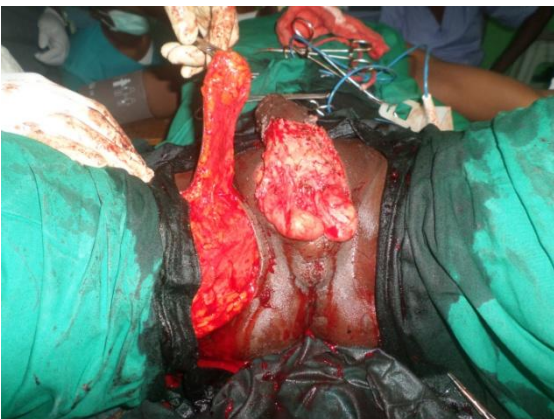


Fig.2. Lateral thigh fasciocutaneous flap and scrotal sac excision.



Fig. 3. After flap inset, wound closure and electrocautery.

DISCUSSION

Condylomata acuminata refers to epidermal manifestations attributed to the epidermotropic human papillomavirus (HPV). It manifests as non-painful smooth and papular or keratotic lesion on the vaginal introitus or near moist surfaces of the perianal area; vagina, labia, vulva and scrotum¹. About 90% of condylomata acuminata are related to HPV types 6 and 11 which have virtually no neoplastic risk.It is most prevalent among persons aged 17-33 years .Female preponderance has been noted though overt diseases are commoner in males.The incidence of genital warts is around 0.1% in the general population and more than 0.5% in young persons².In the United State, annual incidence of condyloma acuminatum is 1%. It is considered the most common sexually transmitted viral infection. Prevalence has been reported to exceed 50%, highest amongst young adults in their 30s and older teenagers. A 4-fold or more increase in prevalence has been reported in the last 2 decades⁵. Risk factors include multiple sexual partners,early coital age, smoking and oral contraceptives. Clinical features Varies depending on number of lesions and location. Small warts are often asymptomatic and present as painless wart-like lesions. There may be burning sensation, bleeding, pain or pruritis in large lesions. There was occasional discharge of clear fluid from the wounds in our patient and reduced libido.

Diagnosis is made clinically by visual inspection, with characteristic skin coloured which range from smooth flattened papules to a verrucous papilliform appearance . Biopsy may be indicated in cases unresponsive to treatment or if there is other reason for uncertainty in the diagnosis. Such was the case of the patient under discussion after years of medical treatment in the dermatology clinic. Differential diagnosis include: Condylomata lata ,Squamous cell Carcinoma of the anogenital region,Molluscum Contagiosum ,Herpes Simplex(especially in patients with AIDs),Angiofibroma ,Skin tags,in females- Vulva intraepithelial neoplasm, Micropapillomatosis of the vulva , hymenal remnant et cetera.

Treatment options include: Chemical or Physical destruction of the warts, immunologic therapy or Surgical excision. Although advocated, there is limited experience with topical anti microbial agents. Spontaneous regression is also possible. A key challenge is the significant recurrence

rate. The patient under discussion had over four years of chemical agents with Podophyllin ,Trichloroacetic Acid,5-FU / Epinephrine gel and yet the lesion persisted . Indications for surgery include: warts unresponsive to medical treatment, refractory lesions and in atypical presentations. The patient under discussion was considered a candidate for Surgical excision following failed medical treatments. Surgical options include: Excision, electrocautery ablation,Cryotherapy with Liquid nitrogen and Laser therapy. The patient under discussion had Extensive Scrotal excision with Scrotoplasty and Electrocautery of the penile lesions. A major challenge is the three year history of infertility and the testicles have now been covered with a thicker skin of the fasciocutaneous flap; this may cause impairment of spermatogenesis and aggravate the infertility problem. We intend to follow up the patient for a long period. He has also been referred to the urology clinic for treatment of infertility.

REFERENCES

- [1] Eron L J, Judson F, Tucker S, Prawer S, Mills J, Murphy K, et al. Interferon therapy for condylomata acuminata. *N Engl J Med.* 1986 Oct 23. 315(17):1059-64.
- [2] Kliever EV, Demers AA, Elliott L, Lotocki R, Butler JR, Brisson M. Twenty-year trends in the incidence and prevalence of diagnosed anogenital warts in Canada. *Sex Transm Dis.* 2009 Jun.
- [3] Nuovo GJ. Detection of human papillomavirus DNA in the lower genital tract. *Infect Urol.* 1994. 87-93.
- [4] Beutner KR, Reitano MV, Richwald GA, Wiley DJ. External genital warts: report of the American Medical Association Consensus Conference. AMA Expert Panel on External Genital Warts. *Clin Infect Dis.* 1998 Oct. 27(4):796-806. [Medline].
- [5] Koutsky LA, Galloway DA, Holmes KK. Epidemiology of genital human papillomaviru infection. *Epidemiol Rev.* 1988. 10:122-63. [Medline].