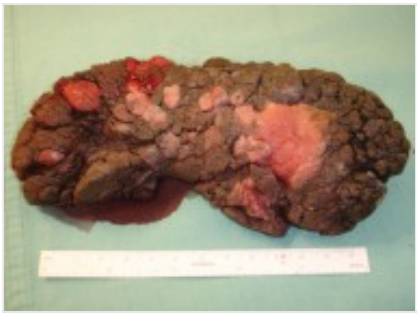
Managing a patient with giant condylomata acuminata



This report focuses on a 55-year-old man of Afro-Caribbean origin who presented to a tertiary teaching hospital with a 30-year history of progressively enlarging lesions in his groin. The presence of the lesions was affecting his physical, sexual, social and emotional well-being. Surgical excision was performed and a histopathological diagnosis of giant cell condylomata was made.

INTRODUCTION

Giant condyloma acuminata (GCA), which was first described by Buschke and Löwenstein in 1925, is a rare variant of condyloma that is rapidly growing, fungating and locally invasive. Synonyms for this condition include, Buschke-Löwenstein tumour and giant malignant condyloma. The lesions are caused by human papillomavirus (HPV) and are usually benign and well-differentiated, although they can result in severe physical, social and psychological difficulties. The condition is rare in children but common in young adults (usually <50 years).

GCA is 3.5 times more common in males than females[1] and most cases occur on the glans penis. It is postulated that it is less common in men who have been circumcised. The most common differential diagnoses are squamous cell carcinoma and Bowenoid papillosis. Management of these lesions at the early stage is essential. Medical treatment is limited to inoperable lesions to arrest growth[2]. Surgical excision remains the optimum treatment modality. This special report focuses on a case of GCA that was successfully treated despite long-standing multiple symptoms.

CASE REPORT

A 55-year-old man of Afro-Caribbean origin presented to the authors' combined dermatology-plastic surgery clinic in a tertiary teaching hospital. The patient had a long history of 'growths' in his inguinoscrotal region. On further questioning he stated that the growths started about 30 years ago as tiny 'wart-type' lesions but had gradually increased in size and number in recent years. The patient's presenting complaints included increasingly severe discomfort on walking, heaviness, malodour, lower back pain and a 'dragging' sensation in his inguinal region. He stated that the lesions were itchy, painful and occasionally bled. In addition, the patient also reported difficulty in developing and maintaining relationships, lack of self-confidence, low self-esteem and an inability to perform sexual

intercourse. His past medical history was unremarkable apart from hypertension, for which he was taking the appropriate medication.

On examination, the patient was found to have multiple, large, exophytic lesions in the groin, scrotum and shaft of the penis [Figs 1-2]. They were pedunculated with numerous satellite lesions in and around the inguinoscrotal region. Due to the extent of the lesion and the severity of the signs and symptoms it was decided to surgically excise the lesion. Consent was also obtained for skin grafting of the region to reconstruct the defect after excision, if required.

Figure 1 - Giant condylomata acuminata (GCA) of the inguinal region on initial clinical presentation.

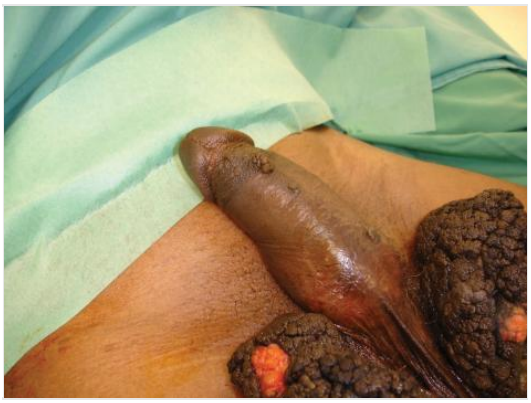


Figure 2 - Lesions affecting the shaft of the penis.

The lesions were excised under general anaesthetic [Fig 3] and sent for histopathological examination. Due to the presence of redundant skin and tissue in this region, the defect was primarily closed [Fig 4] without the need for skin grafting or reconstructive surgery.

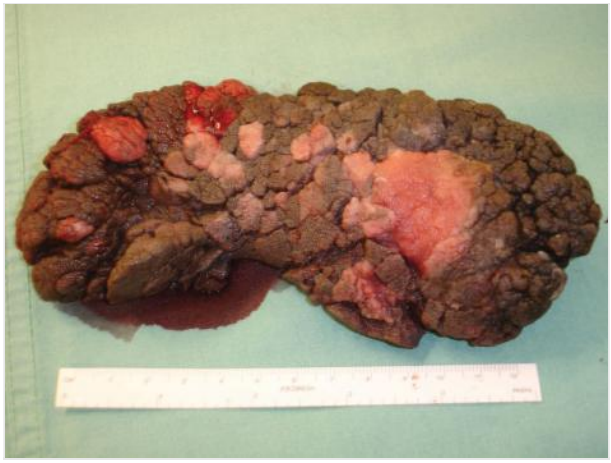


Figure 3 - Macroscopic view of the excised lesion (measuring 15cms x 6cm).

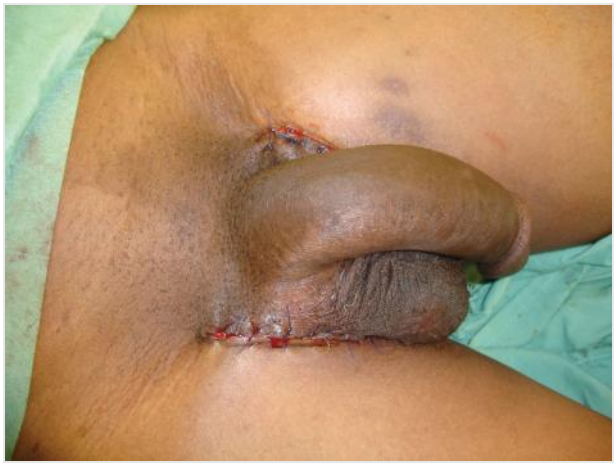


Figure 4 - Inguinal area after excision of the lesions and direct closure of the wound.

Histopathological examination of the specimen showed exuberant squamoproliferation with hyperkeratosis. Acanthotic papillary processes and parakeratosis were also identified, which suggested a diagnosis of GCA. There was no local or lymphovascular invasion and no evidence of malignancy was uncovered.

The patient was reviewed in the clinic after two weeks, by which time the wounds had healed. Therefore, the sutures were removed. The patient was followed-up at three, six, 12 and 18 months and there was no evidence of recurrence or new lesions in the region.

He declared himself very pleased with the outcome, especially the disappearance of symptoms such as difficulty in walking and lower back pain. He also reported an increased self-esteem and more confidence in developing social and personal relationships.

DISCUSSION

GCA is the most commonly diagnosed viral sexually transmitted disease (STD) and is initiated by HPV strains 6 and 11[3]. It usually manifests as a slow-growing, ulcerated and cauliflower-like mass, which can reach 15cm in length and most commonly appears in the anogenital region[1]. If the lesion invades the corpus cavernosum and urethra it can cause fistulation. Secondary infection may result in regional lymphadenopathy.

Anogenital HPV infection is related to degrees of sexual activity such as the age at which the patient first engaged in intercourse, homosexuality and poor hygiene. The causative factors for the development of GCA include chronic phimosis and poor penile hygiene. GCA of the perianal region may ulcerate or form a penile horn and is typically associated with a foul odour. Symptoms of GCA in the perirectal area include perianal mass (47%), fistula or abscess (32%), and bleeding (18%)[1].

HPV is also more prevalent in patients receiving immunosuppressive drugs or chemotherapy and in patients with human immunodeficiency virus (HIV) or diabetes[1]. The lesions can undergo malignant transformation triggered by tobacco use, ultraviolet radiation, pregnancy, folate deficiency and immune suppression. No racial predilection has been reported.

GCA characteristically involves massive epidermal hyperplasia, hyperkeratosis, and parakeratosis and is markedly exophytic. Granular vacuolisation may be present and individual keratinocytes have large cytoplasm and a nucleus with prominent nucleoli. There is also often keratinisation. GCA is histologically differentiated from condyloma acuminata by its propensity to invade underlying structures and features such as a thicker stratum corneum and endophytic down-growth. Common complications of GCA include fistula formation, malodour and secondary infections.

Management

Management of these lesions is usually initiated by investigation with magnetic resonance imaging (MRI) using gadolinium-diethylenetriamine pentaacetic acid (gd-DTPA) contrast[4] and biopsy. Surgical excision is the treatment of choice and adequately treated GCA has a low recurrence rate. Primary surgical therapy may be accomplished by cryosurgery, electrosurgery with either electrodessication or loop electrosurgical excision. Unconventional surgical procedures include carbon dioxide laser ablation, ultrasonic surgical aspiration and Mohs surgery[5].

Medical treatment is mainly employed in patients with inoperable or incompletely excised lesions. Three broad categories are primarily used in treatment of external anogenital warts or GCA - immune response modifiers (eg imiquimod, interferon-alpha), cytotoxic agents (eg the antiproliferative drugs

podofilox, podophyllin, and 5-fluorouracil[2]) and the chemodestructive or keratolytic agents such as salicylic acid, trichloroacetic acid (TCA), and bichloroacetic acid (BCA).

The prognosis of untreated GCA can be destructive locally, extending into the pelvic organs and bony structures[1]. Even with treatment, morbidity rates can be high because recurrence is very common with all treatment modalities. Malignant transformation is reported in 30%[6] of patients. This high rate of recurrence justifies long-term follow up.

CONCLUSION

Although GCA is a benign condition, it can grow rapidly and become locally invasive resulting in severe physical impediment and unpleasant aesthesis. The skin can also ulcerate, leading to bleeding and recurrent wound infections. Surgical excision of these lesions should be performed as early as possible to avoid complications and prevent malignant transformation.

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