Perineal Giant Condyloma Acuminata, Buschke-Löwenstein Tumor: A Case Report

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Abstract

Giant Condyloma Acuminata (GCA), also known as Buschke-Löwenstein tumor, is a rare disease which affects 0.1% of the population. It is considered as an intermediate step between the condyloma acuminata and squamous cell carcinoma and may represent a variant of verrucous carcinoma. Although histopathologically benign, it tends to become very large. Incubation period of Human Papillomavirus (HPV) that causes condyloma acuminatum is 1 to 6 months. The exophytic outgrowths have been described as "cauliflower-like". Due to rarity of the disease, there is a lack of controlled studies on optimal management.

Keywords: Giant condyloma acuminata; Buschke-Löwenstein tumor; Carcinoma; Human papillomavirus

Introduction

Giant Condyloma Acuminata (GCA), also known as Buschke-Löwenstein tumor, is a rare disease which affects 0.1% of the population. It is considered as an intermediate step between the condyloma acuminata and squamous cell carcinoma and may represent a variant of verrucous carcinoma [1]. Although histopathologically benign, it tends to become very large. It is most commonly seen in genital, anal and perianal regions. It is the most common sexually transmitted infection of anorectal region.

Incubation period of Human Papillomavirus (HPV) that causes condyloma acuminatum is 1 to 6 months. The exophytic outgrowths have been described as "Cauliflower-like". As in ordinary condyloma acuminatum, giant condylomas usually harbor HPV 6 and 11. Malignant transformation may occur in up to 53% of cases and there is a high risk of recurrence after surgical resection [2-4]. Immunosuppression seems to confer the most important risk of developing this entity [2]. Due to rarity of the disease, there is a lack of controlled studies on optimal management.

Case Presentation

A 29-year-old man presented to us with the complaint of a palpable mass in the anogenital region that was originated 2 years ago, patient also referred perianal secretion, and anal sphincter incontinence was not referred. Patient was diagnosed with HIV 13 months ago and was already under pharmacological treatment. In the examination of the patient 20 cm × 13 cm mass was observed, cauliflower like, covering all anogenital region (Figure 1). Magnetic resonance imaging of the patient showed that the mass did not invade anal sphincter and was localized only to anal mucosa. Laboratory exams did not reveal any characteristics, his last CD4+ count was 120 cells/uL. Surgical excision was decided. It was performed a local excision of the mass with negative margins in lithotomy position, the excision region was left open for secondary healing (Figure 2). Loop colostomy was not needed. Histopathological examination reported surface hyperkeratosis, very prominent acanthosis, and papillomatosis were the main features and no malignancy nor cytological atypia were detected, therefore verrucous carcinoma was excluded.

Discussion

Condyloma acuminatum is a virally mediated epithelial overgrowth caused by human papillomavirus. A characteristic of giant condyloma is that although it has a benign histological pattern, and if left untreated, it may progress into large papillomatous proliferations that penetrate deep into the underlying tissue [5]. Long-lasting condyloma acuminata, for unknown reasons, eventually evolve into slowly...
invading tumors that penetrate deep into the underlying tissue with viral transformation. Low-risk HPV types 6 and 11 have been detected in the majority of published cases [5]. HPV type 6 or 11 DNA is occasionally found in verrucous carcinoma [6]. Giant condyloma invades by expansion rather than by infiltration, leaving basement membrane intact, and shows a well-stratified epithelium with minimal cellular dysplasia or atypical cells [5].

Most commonly seen clinical symptoms are pelvic pain, perianal secretion, anorectal bleeding and the impairment of anal sphincter continence. Chronic alcoholism, immune suppressing medicine and diseases increase the recurrence and malignant transformation risk. With our patient, we describe a classic example of giant condyloma with respect to origin, slow expansion, clinical morphology and histopathologic appearance. The reason for the growth in this patient was because he was being treated in another hospital with no good results.

Giant condyloma, as this case, has been treated by several modalities. Although, most of published studies have concluded that the only consistently effective therapy is wide surgical excision of the tumor with clear margins with or without adjuvant chemotherapy [7]. In cases where rectum and anal sphincter muscles are invaded, recurrence or malignant transformation is developed; there are various treatment options as abdominoperineal resection. Also, it is recommended a temporary loop colostomy to prevent fecal contamination in the wound [8,9].

Patients with extensive lesions may require systemic chemotherapy with a variety of combinations of methotrexate, cisplatin and bleomycin. Topical therapy results have been poor. Other reported treatments include laser excision, electrocauterization and cryotherapy.

Regardless of the treatment, there is a high chance of recurrence, having an overall mortality rate of 20% to 25%.

**Conclusion**

The optimal management of anogenital giant condyloma acuminata remains to be determined. Staged surgical excision should be conducted to achieve an optimum outcome. It is necessary to determine histopathologically whether a malignant transformation occurred or whether there is invasion with radiological and endoscopic imaging.

**References**