Giant condyloma acuminatum quickly growing. Case report

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SUMMARY: Giant condyloma acuminatum quickly growing. Case report.

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Background. Giant Condyloma Acuminatum (GCA) is a rare, slow growing, large cauliflower tumor of the penile foreskin and perianal region with benign histologic appearance but high propensity for local invasion and recurrences. GCA is associated with Human Papilloma Virus (HPV) types 6 and 11 and it also has considerable risk of neoplastic transformation into fully invasive squamous cell carcinoma in about 5 years.

Objective. Because of the rarity of perianal GCA, to date there is no general agreement on the best method for treatment. We wanted to know if surgical approach only was a good method to treat our case.

Case report. A 28 years old man, HIV-negative, with a 4 years history of perianal GCA quickly growing underwent full thickness local excision at least 0.7 cm margin of normal tissue with skin grafting taken from the thighs. Fecal contamination was avoided by diet and loperamide per os. At two years follow-up no recurrence was detected.

Conclusion. Surgical approach with full thickness excision and immediate skin-grafting and regular follow-up demonstrated effective to treat GCA and to minimize disease recurrence.

KEY WORDS: Giant Condyloma Acuminatum (GCA) - Buschke-Loewenstein tumor.

RIASSUNTO: Condiloma acuminato gigante a rapida crescita. Caso clinico.

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Introduzione. Il condiloma acuminato gigante (GCA) è un raro tumore a lenta crescita, vegetante che colpisce più frequentemente il prepuzio e la regione perianale, con un aspetto istologico benigno ma ad elevata tendenza alla invasione locale ed alle recidive. Il GCA è associato all’infezione da parte dei sierotipi 6 ed 11 del Papilloma Virus Umano ed ha un alto rischio di trasformazione neoplastica in carcinoma squamatoso in 5 anni.

Obiettivi. Data la rarità del GCA a localizzazione perianale, ad oggi non ci sono linee guida ben definite riguardo il trattamento. Lo scopo del report è stato quello di verificare se il solo approccio chirurgico fosse sufficiente per la prevenzione delle recidive.

Caso clinico. Un uomo di 28 anni, sieronegativo per HIV, con una storia clinica di GCA insorto 4 anni prima e cresciuto rapidamente, è stato sottoposto ad un’ampia esCISIONE della lesione con un margine dal tessuto sano di 0.7 cm e ricostruzione plastica della perdita di sostanza mediante utilizzo di lombi cutanee di scorrimento. La contaminazione fiscale della ferita è stata evitata mediante l’adozione di misure dietetiche adeguate e la somministrazione di loperamide per os. A due anni di distanza non sono state riscontrate recidive.

Conclusioni. L’approccio chirurgico con ampia esCISIONE della lesione ed immediata ricostruzione della perdita di sostanza, mediante l’impiego di lombi cutanee di scorrimento, è risultato efficace nel trattamento del GCA, come dimostrato dal follow-up a due anni.

Introduction

Giant Condyloma Acuminatum (GCA) or Buschke-Loewenstein tumor is a rare, slow growing, large, cauliflower-like tumor, originally described by Buschke in the penile foreskin in 1896. It was further delineated in more detailed form in 1925 by Buschke and Loewenstein. The first reported case of GCA in the perianal region was described in 1965 by Dawson (1) et al. Until 1994, 42 cases of perianal GCA (2) were reported. In 2001 the cases of GCA described in the literature were 51 (3), whereas from 2001 to 2009 the cases published are about 20.

GCA has a benign histologic appearance, invades by expansion rather than by infiltration, leaving basement
membrane intact, and shows a well-stratified epithelium with minimal cellular dysplasia. GCAs do not give metastases but have high propensity for local recurrence, fistulization or perineal abscesses, ulceration, and hemorrhage difficult to control (4). Also GCA has considerable risk of neoplastic transformation into fully invasive squamous cell carcinoma.

There is still no general agreement on the best method of treatment for perianal GCA due to the relative rarity of the disease, the propensity to local invasion and recurrences and for its localization that results associated with high risk of wound infection.

We report a case of perianal GCA quickly growing successfully treated by surgical excision only.

Case report

A 28 years old man was admitted to our Surgical Unit in the October 2008 due to the presence of a mass in perianal region. He dated the beginning of his complaint in February 2004, when he referred the arising of an asymptomatic mass of about 1 cm in proximity of the anus. Mass slowly increased in volume up to reach the size of about 3 cm in December 2007. In January 2008 the patient complained of serotine fever for 20 days treated with antipyretic drugs. Since this period the perianal lesion rapidly increased. He denied sexual promiscuity and alcohol or drugs abuse.

At the physical examination a giant, 10 x 8 cm cauliflower-like, perianal lesion (Fig. 1) was revealed associated with small condylomatosis lesions in the scrotum; the penis did not present any alteration. By proctoscopy the anal canal was found not to be involved and condylomatosis lesions stopped in the transition mucocutaneous zone. The inguinal lymph nodes were normal. Dermatological examination revealed no other condylomata. Test for syphilis, anti-HIV 1-2 antibodies, HbsAg, and anti-HCV antibodies assay were all negative. The lymphocyte subpopulations was within the normal range. The papillomavirus (HPV) research was positive for genotype 6 e 11. A wide full thickness local excision with at least 0,7 cm margin of normal tissue was performed. The wound was covered with skin grafts taken from the thighs. The small condylomata of scrotum were cauterized.

Fecal contamination was avoided by diet and Loperamide per os. Postoperative course was uneventful. At the histological examination the diagnosis was GCA without squamous cell carcinoma foci. The patient was checked every 15 days for the first six months and afterward once at month (Fig. 2). At two years follow-up no recurrence was detected. No evidence of anal canal stenosis or incontinence was recorded.

Discussion

GCA is predominant in the male sex with a ratio of 2,7:1. The mean age of presentation is 44 years (5) and only three cases has been reported in children (6). GCA occurs more frequently in patients affected by acquired or iatrogenic immunosuppression with a rapid growing. In subjects with normal immunological status GCA is associated with slow growing, even of 20 years of duration. Often infact the patients themselves have self-neglect and understimation of the disease (7). Condyloma spreads in circumferential way from the transition mucocutaneous zone to the perianal region up to 5-10 cm. The anal canal is often not involved by the disease whereas frequently it involves the external genitals.

Some authors consider GCA as an intermediate lesion between benign acuminatus condyloma and squamous cell carcinoma (8). These lesions are caused by papillomavirus. More than 40 type of papillomavirus have
been identified to date, some of which are the aetiolo-
gical agents causing verrucas and papillomas that can oc-
cur in various anatomical sites. Human papilloma virus
types 6 and 11 generally lacking malignant potential, have
been demonstrated in the majority of published cases of
condyloma acuminatus and GCA (7), instead types 16 and
18 are more frequently associated with higher de-
grees of dysplasia, carcinoma in situ and invasive carci-
noma (7). Human papillomavirus may be acquired via
sexual transmission but also vertical transmission and auto-
or hetero-inoculation from extragenital contact
(hand warts) (6).

The pathogenesis of papillomavirus infection in un-
doubtedly influenced by the host’s immune response, and
particularly by cell-mediate response, which mainly in-
volves the CD8+ lymphocytes and natural killer, who-
se activity is boosted by interferons (4). Immunoop-
pression is a risk factor for the rapid growing of condyl-
omas and their malignant transformation (9,10). GCA
and squamous cell carcinoma can coexist in 30 to 56%
of patients (2,8). Whether these lesions represent two se-
parate entities or a progression of the primary GCA into
a malignant lesion is unclear (11). Increased viral gene
expression or inability to mount a cytotoxic immune re-
sponse or local irritation have been proposed as factors
responsible to initiation carcinogenesis (12). The average
time of transformation of GCA in carcinoma is estimated
to be about 5 years (2). Therefore, a major risk of ma-
lignant transformation is associated with long duration of
disease.

Due to the rarity of GCA, there are no guidelines for
the treatment, in fact GCA has been treated by a variety of
modalities. Sometimes the literature reports include
patients with GCA in neoplastic transformation. In this
case the therapeutic approach needs to be more aggres-
sive and often includes radiotherapy, chemotherapy or
their combination. The surgical excision of the tumor
represents the first step of treatment because only the hi-
Stological examination consents to exclude the presen-
tation of squamous cell carcinoma that require more rad-
ic management. The surgical excision of the tumor
should be performed full thickness including cutaneous
and subcutaneous tissues with clear margins in order to
reduce the incidence of recurrence, however the free-marg
distance is not well defined. Some authors reports
the section with clear margin at 1-5 cm (4), others (5)
describe 1cm and others 0,5 cm (13). In our case the section
was performed at almost 0,7 cm from clear margins.

Various methods of treating the skin defect after rad-
cial excision of perianal lesions have been described, such
as healing by secondary intention (14), S-plasty (13), V-
Y plasty (15) and mesh skin grafts (5, 16, 17). Colostomy
for avoid a massive fecal contamination of perianal wound
is rarely done (13). In the first days after surgery a low-
residue diet and loperamide per os are prescribed in or-
der to avoid fecal contamination. Good results have been
obtained with excision of GCA with CO2 laser that con-

ents to obtain optimal haemostasis and immediate ste-
rilization of wound giving a best cicatrisation respect to
the traditional techniques (18,19).

After surgical resection the recurrence occurs in more
than half case. In case of recurrence, a part from a re-
excision of the lesion, non-surgical approaches both to-
pical, systemic and radiant treatments can be advoca-
ted. The immunotherapy have a good rationale, howe-
er it not always gains satisfactory results. Individual
vaccines have been prepared with a claimed response rate
ranging from 70 to 100% (20,21). Interferon has been
used via topical, intraleisonal, or systemic sommini-
stration; the number of the reported cases is small and
the results are contradictory (12). Beyond immunosti-
mulatory effect, the interferon acts byantiviral and an-
tiproliferative direct effects (12). Also the combination
of the Etretinate or Acitretin per os and Imiquimod oint-
ment has been reported to be effective in GCA (22); their
effectiveness could be ascribed to their immunomodu-
ulating, antiproliferative and proapoptotic properties and
to normalization of epidermal differentiation (22). To-
pical application of Podophyllin resulted effective in the
treatment of acuminate condylomas but ineffective in
the management of GCA (5). Topical chemotherapeutic
drugs with or without oral therapy has been showed a
slight effectiveness (23). The Acitretin is a retinoid drug
and as retinoid have an anticancerogenic properties , also
for the absence of side effects and for its simple use, it
could be administered not only for the treatment of the
GCA but also for the prevention of the recurrence (22).

The role of radiation therapy is controversial , because
it can facilitate the transformation of GCA in squamous
cell carcinoma (3).

A close follow-up is recommended in order to evi-
dence the recurrence in early phase. To date, there is no
data in the letterature regards the duration of follow-
up. It seems that the recurrences are more frequent in
the first months after surgery.

**Conclusions**

In our patient the GCA growing occurred with two
modalities, earlier slowly and then rapid, the rapid
growing arising after an episode of fever. A so rapid
growing of GCA has been observed also by Renzi et al.
(14) in women pregnancy. Initial surgical approach
with full thickness excision is recommended. Immedia-
te skin grafts is necessary for cover the large wound. Loop
colostomy in order to minimize wound contamination
risk is not necessary. A regular follow-up is recommen-
ded to ensure no recurrence disease.
References


