

CASE REPORT

Penile cancer in patient with a ‘Bouglou’ penile adornment

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Abstract

Implantation of penile nodules under the foreskin aims at improving male and female sexual pleasures during intercourse. This case discusses the characteristics of the South American penile adornment ‘Bouglou’ as well as the risk factors for penile cancer in this region of Amazonia. This is a case report of a 48-year-old man whose penis presented a destructive gland/penile shaft lesion and three adornments in the penile shaft, reported as ‘Bouglou’. The diagnosis of penile cancer was confirmed after total penectomy. This study is the first that suggests a possible association between squamous cell carcinoma and these penile adornments.

INTRODUCTION

Implantation of penile nodules under the foreskin is usual among southeastern Asian men and prisoners in Indonesia. It can be first found in *Kama Sutra*, the classical Indian book. The main objective of these penile implants is the improvement of sexual pleasure during intercourse [1].

There is no direct relationship between the use of these adornments and carcinoma of penis in the literature. However, in most cases of penile cancer, external factors can influence the development of the disease [2].

CASE REPORT

A 48-year-old man, hailing from French Guyana, searched for help as he was suffering from a painful penile destructive lesion. He reported that it began as a wart at the penile shaft 6 months earlier, and then grew towards the glans. He tried to treat it by

first immersing his penis in sulphuric acid and afterward exfoliating it with ‘Pedra Pome’ (a stone usually used to exfoliate skin), without any improvement. He said that his first sexual intercourse was at 13 years of age, and that he had never used condoms. He was diagnosed with syphilis at 22 years of age, which was completely cured as a result. When he reached the age of 33, he implanted three nodules under the foreskin penile shaft, which he called ‘Bouglou’ adornments, because his wife had requested him to do so. She was a native of French Guyana and told him that he should do these implants in order to marry her. He denied use of illegal drugs. He also said that sometimes he had sexual intercourse with goats, which is common in rural parts of French Guyana, although not necessarily culturally acceptable.

He was evaluated by the urologist who noted the lesion with bilateral lymphadenopathy and was submitted to a total penectomy. The subsequent histology confirmed epidermoid cancer which had infiltrated the glans, coronal sulcus, foreskin, corpora cavernosa, corpus spongiosum and penile urethra. He was

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discharged on the third postoperative day with a programmed bilateral inguinal lymphadenectomy (Figs 1 and 2).

DISCUSSION

Implantation of penile nodules has been done for thousands of years in different parts of the world. There are several reasons for these implants, one of which is mainly self-enhancement to improve sexual performance and penile aesthetics [3].

In French Guyana, the practice of penile implantation is known as ‘Bouglou’ and the objects usually used as implants



Figure 1: Penile neoplasm in glans, coronal sulcus and foreskin. The white arrows indicate the ‘Bouglou’ penile nodules.



Figure 2: ‘Bouglou’ penile nodules. The difference in their shapes and materials can be noted. On the right is the surgical product of total penile amputation.

are domino fragments and toothbrush handles; these procedures are not carried out under hygienic conditions. Bleeding, swelling and infection are frequent complications and usually need immediate treatment, resulting in difficult scarring lesions [4].

In 2010, Fischer *et al.* demonstrated that men with penile adornments suffered from painful inflammatory processes for many years after the implantation. These men also have a greater risk of acquiring sexually transmitted diseases (STDs) from the instruments used in insertion, by open wounds during sexual intercourse, and by condom perforation [1].

In this case report, the reason for implanting the penile nodules was the partner’s sexual satisfaction. His wife had imposed it as a condition before he could marry her. Other studies suggest that these penile adornments try to compensate for the subjective small size of their penis, their lack of virility and/or their poor sexual performance [5].

Yap *et al.* [6] showed that the penile implants are common in the prison population. In fact, ex-prisoners who escaped from Suriname introduced this practice in French Guyana during the Civil War in the 1980s, and it probably migrated to Brazilian Amazonia because of gold-digging and other trade activities between the Brazilian state of Amapa and French Guyana. Apart from sexual attraction, ‘Bouglou’ implants are also considered distinctive marks of those belonging to a specific group such as prisoner gangs and gold-diggers [4].

The patient was not drug addicted but confirmed sexual promiscuity, and it is known that men with penile implants have a high probability of using illicit drugs, of being sex workers and of being tattooed or having piercing implanted in prison, which indicates a risky lifestyle for several transmissible diseases [6].

Fifteen years after having inserted the ‘Bouglou’ implants, the patient developed penile cancer, which was definitely aggravated by self-treatment and delayed medical search. Nowadays, it is proved that epidermoid carcinoma can be caused by mutilating circumcision scars. Men with penile lesions deriving from these scars have a 4- to 6-fold elevated risk of developing squamous cell carcinoma [2]. It is possible that uncorrected-implanted penile nodules provoke local and repetitive trauma that can elicit chronic inflammation, which can play a role in the pathogenesis of carcinoma.

Penile cancer is frequently found in poor countries [7]. In Brazil, it represents almost 2% of all male cancers. Some Brazilian areas have a high incidence, corresponding to 17% of all male malignant neoplasms [8].

Social, cultural, hygienic and religious habits are considered important risk factors for penile cancer [9]. The main risk factor is phimosis [8]. Other risks are chronic inflammatory conditions, early onset of sexual activity, sexual promiscuity, condyloma history and tobacco smoking [9]. Human Papillomavirus (HPV) infection is associated with half of penile cancer cases [7].

Histological penile cancer subtypes are consistently associated with HPV infection—epidermoid, basaloid and verrucous carcinoma [7]. In this case, epidermoid subtype was confirmed. This subtype is responsible for ~95% of all penile cancers [8].

The prevalence of penile cancer is higher in the sixth decade of life, with almost 79% of Brazilian patients older than 45 years of age [8].

Zoophilia has been present in human society since ancient times. Factors related to this paraphilia may favour a chronic inflammatory process and, consequently, dysplasia, such as penile contact with animal external genital mucosae, resulting in

microtraumas and exposition to animal anogenital secretion, which can be carcinogenic to human beings [7].

Thus, the relationship between penile cancer, zoophilia and STDs can reflect the zoophilic lifestyle, as these men have a greater number of sexual relationships with prostitutes and turn out to be more exposed to STDs, compared with those who do not have sex with animals [7]. The patient admitted his zoophilic behaviour.

In Amazonia, a multiplicity of causes can lead to penile cancer, including those previously reported in the research literature (as mentioned above), such as promiscuity, HPV and zoophilia. One risk factor that may be important in this part of the world is penile adornment. Because of the rarity of both penile cancer and penile adornment, it is difficult to establish the relative importance of the chronic inflammation associated with the penile adornment in the pathogenesis of this cancer. To our knowledge, there is only one other article which suggests a possible association between squamous cell carcinoma and penile adornments [2], but none in a South American Amazonian man.

AUTHORS' CONTRIBUTIONS

All authors are involved in the treatment of the patient and wrote and finalized the manuscript.

CONFLICT OF INTEREST STATEMENT

None declared.

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