Oncology

Large verrucous penis cancer in a young patient in the Brazilian Amazon: Case report and discussion on the region's reality

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A B S T R A C T

Introduction: Penile cancer is a rare malignant tumour top in urology, especially in developed countries or in a favourable cultural habit. However, in developing countries or with a low socio-economic population, the incidence increases considerably, as does the stage at which the patient arrives for the first care.

Case presentation: Male patient, 20 years old, from the interior of Amazonas - Brazil, has been referred to a Urological Service in the Emergency Room due to a vegetative lesion of approximately 10 centimetres, with an ulcerated centre and irregular borders in penile glans. An incisional biopsy was performed, which revealed invasive squamous cell carcinoma and was referred to the elective surgery service.

Conclusions: The socioeconomic condition of the population influences in a relevant way in cases in the Amazon region, with little and difficult access to preventive information and to the public health system, mainly in the interior of the state. Young patients tend to maintain the confidentiality of the picture that leads to the progression of the disease, with negative outcomes, requiring intense psychological monitoring.

Penile cancer (PCa) is a rare type of malignant tumour in the urological spectrum. Even within malignant diseases of the genital tract, it doesn't present with high frequency, mainly in developed countries. While overall rate reaches 0.84 cases per 100,000 inhabitants, African, Asian and South American countries show high numbers when compared to these, with Brazil at the highest rate in South America 5.7 per 100,000 inhabitants. This scenario is due to a relationship between incidence of PCa and low socioeconomic status of population. However, we have three more factors that explain an increased frequency of PCa. Smoking habit and human papilloma virus are two of this factors, but three more factors that explain an increased frequency of PCa.

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Penile cancer (PCa) is a rare type of malignant tumour in the urological spectrum. Even within malignant diseases of the genital tract, it doesn't present with high frequency, mainly in developed countries. While overall rate reaches 0.84 cases per 100,000 inhabitants, African, Asian and South American countries show high numbers when compared to these, with Brazil at the highest rate in South America 5.7 per 100,000 inhabitants. This scenario is due to a relationship between incidence of PCa and low socioeconomic status of population. However, we have three more factors that explain an increased frequency of PCa. Smoking habit and human papilloma virus are two of this factors, but they are dependent of patient life style. The third is structural and modifiable, the presence of phimosis is related to the diagnosis of PCa, due to better cleaning when the patient is circumcised. This fact leads to a curious event in some countries of religious cultures that carry out the children's postectomy at very early age. They have lower rates of PCa, reaching close to zero and irrelevant in the global epidemiological scenario. Bringing it to the local reality, in a recent work carried out at the Foundation Centre for Oncology Control of the State of Amazonas (FCECON), there were even more alarming figures for our society: PCa represents 20% of masculine neoplasia until 1999 in the state of Amazonas, and the frequency in brazil is only 2%, added to the fact that the region does not have such a large structural contribution for a large number of patients, which generates an increase in the waiting time and complications of cases.

Within the characterization of PCa, the squamouscellular or epidermoid type presents a higher frequency than the other types, being able to be diagnosed in situ or invasive stage, although others, being able to be diagnosed in situ or invasive stage, although most cases are diagnosed in advanced stages of the disease. The clinical prognostic depends on the clinical stage, which may present local
pruritus and pain, but the visual complaint is the most recurrent, even though the lesion size does not necessarily increase at high speed. Lymph node enlargement may be present in cases that are already advanced and represent complications in it. In actual literature, articles don’t cite the tumour’s size with young patient, but this case shows one of the biggest in young patients.

**Case presentation**

A 20-year-old male patient from the interior of Amazonas State, Brazil, has been referred to emergency room in the emergency room due to a vegetative lesion of approximately 10 cm, with an ulcerated centre and irregular borders in penile glans (Figs. 1 and 2), with a foul odour, pruritic, with a 1-year course, associated with bilateral inguinal lymph node enlargement intensely painful for 3 months, hyaline secretion through the urethra with mild febrile episodes without gauging, and weight loss of 6 kilos in 2 weeks. Denies visual haematuria, dysuria, or other changes in the urinary tract since the onset of the condition.

During hospitalization, elevated leukocyte levels with neutrophilia (White blood cells at 17.270 with Neutrophils at 80.4%) and microscopic haematuria were observed in urine test, with no changes in blood pressure or other vital signs, and treatment with Clindamycin and Ceftriaxone was performed, with consequent incisional biopsy performed at the site and high on the 5th day of hospitalization.

Histopathological examination revealed invasive squamous cell carcinoma, well differentiated in biopsy tissue, without vascular or lymphatic invasion. He was referred to the elective surgery service after a week to perform partial penectomy, remaining only 3 cm of penile stump due to the extension of the lesion and the safety margin of the surgery and inguinal lymphadenectomy, spatulation and maturation of the urethra during surgery with foley catheter of 14 french. The surgical sample was sent to anatomopathological examination as a protocol at the hospital (Fig. 3). The patient was discharged in 3 days, stable, with a clean operative wound without purulent secretion, with referral to psychological counselling due to intense anxiety in the night before surgery and by suggestion of the Hospital Psychology service due to the patient’s delicate situation.

**Discussion**

PCa shows itself as frequent pathology in underdeveloped countries due to its association with the socioeconomic profile of the population. In the case presented we have an example of this fact. In the Brazilian Amazon region, the general population has difficulties in accessing the public health system, which is further aggravated by patients residing far from health centers. Referring to the cultural characteristic of the region, postectomy is uncommon in most of the men, besides that the state of Amazonas presents a great incidence in PCa due to HPV infection, what currently leads to the stimulus in use of condoms in sexual relations by public agencies, added to the awareness of proper cleansing of the male genital area.

To further complicate the situation in the region, North Brazil has the highest rate of cervical cancer among all regions, another HPV-related carcinoma. All these difficulties can explain the initial state of the patient when arriving for the first consultation, already with a significant advance of the disease and with outcomes that are not easy to manage, especially post-penectomy, partial or total. The psychological impact is certain and psychologic and psychiatric follow-up is essential, otherwise, especially in young patients, depression, anxiety and suicide may occur.

**Conclusion**

The case unfortunately doesn’t have the adequate and desired outcome due to the difficulties in the patient’s region: the difficulty of distance, bad access to health, low knowledge about their situation and possibly lack of adequate hygiene, associated with lack of guidelines on disease. Campaigns on HPV and cervical cancer in women are common, however, men should also be made aware of the prevention to avoid complications about it. When the conduct is penectomy, psychological and other professional follow-up to generate a higher quality of life should be performed, otherwise outcomes such as depression or suicides are frequent.
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