Case Report – Giant Squamous Cell Carcinoma of Penis with Rapid Progression

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Abstract

A 75-year-old male came to the General surgery OPD with a giant ulcerative genital mass rapidly growing for 4 months. Patient noticed a 4 cm × 4 cm cauliflower-like mass located in the dorsal shaft of penis. The mass became aggressive and destroyed the entire penile shaft and urethra within 4 months. He underwent radical penectomy with bilateral orchidectomy, scrotal extended resection, formation of a perineal urethrostomy and left inguinal lymph node biopsy. Pathology revealed poor-differentiated invasive squamous cell carcinoma.

Keywords: Squamous cell carcinoma of penis, Buschke Löwenstein tumor.

INTRODUCTION

Giant penile tumors were reported in many cases. A large number of penile carcinomas are found to be squamous cell carcinoma. Penile cancer constitutes forty five percent of all cancers in the genitourinary region and accounts for up to twenty percent of all cancers in total. Below is a report on a rare case with squamous cell carcinoma in the penis presenting as a cauliflowerlike mass

Case report

A 75-year-old male came to the General surgery outpatient department with complaints of mass over the penis. The mass was insidious in onset ,rapidly growing in size for four months to attain the current size. It was cauliflower-like shaped over the dorsal shaft of the penis.

There was no history of sexually transmitted disease for the patient and in his family. Physical examination showed growth

infiltrating into the penis and the urethra although the external urethral meatus was unrecognisable.

Frank purulent discharge was present. Bilateral enlarged inguinal lymph nodes were palpable. He had a history of loss of appetite and significant loss of weight of about 15 kgs in past two months

Over the course of 4 months the Lesion became invasive and disfigured the urethra; dorsal and ventral shaft of the penis as a result of which patient had difficulty in voiding urine.

Biopsy of the tumor was sent and Histopathology revealed focal invasive squamous cell carcinoma. Figure 1 showing $4 \times 4 \text{cm} s$ fungating mass in the penile shaft.



Laboratory results showed total count 12×109 /L with 89% neutrophils.

Total serum protein was 60.2 g/L(65-85g/L), and albumin28.2g/L(40-55g/L).

Serum tumor markers testing showed high-level of squamous cell carcinoma antigen (SCC-Ag, 59.2ng/ml), elevated CA199-49.20 U/mL and CEA-10.72ng/mL.

Patient underwent preparation preoperatively for 7 days

And was advised intravenous antibiotics; analgesics and intravenous albumin therapy. Daily cleaning and Debridement of the mass done using hydrogen peroxide lotion.

Figure.2. radical penectomy, scrotal extended resection and bilateral orchidectomy, formation of a perineal urethrostomy.



A radical penectomy, scrotal extended resection and bilateral orchidectomy, formation of a perineal urethrostomy and inguinal lymph node biopsy was performed.

Pathologic examination showed clustered tumor cells arrangement. nests patterns with nucleoli was also found

This was used to confirm high-grade invasive squamous cell carcinoma (SCC)with negative surgical margins staged -pT3N0M0.

Postoperatively the patient was monitored for 10 days after which he was discharged and advised to be on regular follow up.

At the 24th month follow up there was a marked improvement in his General body habitus. All Serum tumor markers SCC-Ag, CA199 and CEA returned to normal range.

Discussion

Giant penile carcinoma can sometimes rapidly progress and such a tumor is called Buschke Löwenstein tumor.

This tumor was first described in 1925 by Buschke and Löwenstein.

It is locally invasive and rapidly growing and comes under the classification of verrucous carcinoma. Buschke Lowenstein comprises five to sixteen percent of all penile carcinomas.Massive squamous cell erosion, destruction and invasion of the entire genitalia is not characteristic of Buschke Löwenstein tumors. Most common risk factors are multiple sex partners, HPV exposure especially HPV prevalence), 16(highest tobacco abuse genitourinary and poor hygiene.[2]

It commonly appears on the glans penis, over the prepuce or over the sulcus. Its most common presentation is as a mass or growth. It may also present as a nodule, ulcer with severe itching, burning sensation, pain, bleeding or profuse foul smelling discharge[3]

In the case presented above, the patient had inability to retract the foreskin. Although initially it started as a growth on the shaft of the penis it quickly invaded the entire penis. The period of invasion was extremely short local invasion in such a short period.

The ideal treatment plan for invasive squamous cell carcinoma of penis is total penis resection. In patients with large scale scrotal skin destruction, after resection of the original tumor; a musculocutaneous flap is a good option to repair the destroyed area.[4]

In our case, this patient had enough scrotal skin available to cover the testis. And performed perineal urethrostomy and bilateral orchidectomy. Inguinal lymph node biopsy showed no evidence of involvement and bilateral lymphadenopathy subsided after antibiotics treatment.

Conclusion

Invasive penile squamous cell carcinoma are relatively common and there should be early diagnosis and treatment. A delay in diagnosis can lead to morbidity and mortality. This case highlights the importance of early diagnosis and treatment in invasive penile squamous cell carcinoma. Early treatment can prevent organ dysfunction, squat urination and even death.

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