CASE REPORT

Unusual Presentation of Carcinoma of Penis

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ABSTRACT

A case of carcinoma of the penis in a 55-year-old landlord is described. He presented with a fungating growth on the shaft of his penis with an unusual history. The lesion started as a nodule in the coronal sulcus leading to thinning of urinary stream and ultimately retention of urine, which was diagnosed and treated as a case of urethral stricture. Wedge biopsy of the growth revealed the case of squamous cell carcinoma of penis. Ultrasonography and CT scan of pelvis and abdomen proved the disease to be localized to penis and total penectomy was carried out.

Key words: *Penile growth. Biopsy. Squamous carcinoma. CT scan. Total Penectomy.*

INTRODUCTION

Penile cancer is uncommon and constitutes less than one percent of all cancers in males. The incidence shows marked geographical variations and is greatly increased in populations that do not practice circumcision in infancy. The average age of onset is about 60 years.[1-3] The etiology is unknown. Venereal and herpetic infection is not a causative factor. A non-retractile foreskin and poor hygiene are clearly associated in its development. Its association with balanitis xerotica obliterans is a rare, though recognized occurrence.[2,4] Causative role of human papilloma virus is controversial.[5,6]

Squamous carcinoma constitutes nearly all penile cancers. Rare penile cancers include melanoma, basal cell carcinoma, sarcomas, fibrous histiocytoma and secondary carcinomas.[1,7,8] Carcinoma in situ including premalignant lesions, Bowen's disease, Paget's disease, and erythroplasia of Queyrat may appear as moist or dry red scaly or warty lesion. Squamous cancer usually starts on glans or coronal sulcus as a nodule, foul smelly ulcer or cauliflower like mass, which invades corpora cavernosa as it progresses, while the urethra is usually spared until late in the course of the disease. The inguinal lymph nodes are enlarged in two thirds of cases but in half of these, lymphadenopathy is the result of secondary infection. The tumour may disseminate most often to lungs and rarely to bones or other sites.[1-3,9] Biopsy or imprint slides from the penile mass confirms the disease. Chest X-ray, Ultrasonography, CT scan and MRI of groins, pelvis and abdomen are helpful in staging the disease.[1-3,10]

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Surgery is the principal modality of therapy ranging from circumcision to total penectomy with perineal urethrostomy. Primary radiotherapy has a role to avoid penectomy for small lesions of stage I and as an adjuvant therapy for high stages with promising results. Topical chemotherapy and laser therapy may have good response in premalignant lesions. Penile cancers appear to respond to bleomycin and cisplatin in advanced cases. Five-year survival for stage I and II disease is reported upto 70 percent.[1-3,11,12]

CASE REPORT

A 55-year-old landlord, referred from rural area by a famous spiritual healer, was hospitalized for a gradually increasing fungating growth of his penile shaft in the surgical department. A detailed history pointed out the development of dysuria and thinning of urinary stream, one year ago, that was treated by local doctors to some extent. Three months later, he noticed a small nodule at the coronal region on left side and exaggerating dysuria to ultimately retention of urine within 15 days. He consulted an urologist, who carried out optimal internal urethrotomy with diagnosis of balanitis and stricture urethra. The urinary complaints were improved for three months but the coronal nodule enlarged and developed two foul smelling discharging sinuses with induration. Various urologists were consulted and the case was labelled as stricture urethra with periurethral abscesses leading to urethral fistulae unanimously, so internal urethrotomy with incision drainage of indurated lesion was carried out. The lesion became foul smelling and extended to involve the penile shaft and started fungating out resulting in retention within two weeks. Metallic bouige was attempted for dilatation and suprapubic cystostomy was performed. The scrapings from growth were sent for cytology, which showed squamous cell carcinoma but the patient left against medical advice for a spiritual healer. The patient was

non-smoker, landlord and circumcised at the age of 13 years. He had multiple marriages, and had two sons and three daughters of good health. There was no previous history of genital warts and urethral discharge and no family history of any malignancy.

Physical examination of this middle aged, intelligent, cooperative but anxious man of moderate built and nutrition, having suprapubic cystostomy in situ, revealed pallor and a temperature of 100^{o} F with all other vitals normal. Local examination showed a fungating ulcerative growth, 5-7 cm, infiltrating glans, corpus spongiosum and both cavernosa with almost complete destruction of urethra upto the base of penile shaft with induration and skin excoriations in the surrounding and foul smelling pussy discharge. The inguinal lymph nodes were not palpable bilaterally (Figure 1). There were fungal dermatological lesions in the surroundings of both groins and lower abdomen. Systemic examination revealed all findings within normal limits.

On blood analysis, his haemoglobin was 9.2 grams percent, ESR was 87 mm/hour and TLC was 10500/cmm. His HBV, HCV and HIV were negative. Liver functions, renal profile, ECG and chest X-ray were normal. Ultrasonography and CT scanning of abdomen, pelvis and both inguinal regions revealed no lymphadenopathy (Figure 2).

Total penectomy was performed with reconstruction of urethra by exteriorizing the bulbar urethra, 7 cm in front of the anal verge, and suprapubic cystostomy was removed (Figure 3).

Histopathological report confirmed the diagnosis of squamous cell carcinoma grade II with tumour free resected margins and absent lymphovascular invasion. The wound healed and the patient was passing urine, fully continent but a little bit depressed.

DISCUSSION

Penile cancer is a rare entity among malignancies. Its incidence varies worldwide and constitutes less than one percent of cancers in males in the United States of America.[1] The reported incidence are much higher than Pakistan. The situation can be assessed by the fact that this was the first case of carcinoma of penis reported in a Muslim. The age of onset in this patient was 55 years, which was consistent with most of the global reports.[1-3, 12-15]

Circumcision in infancy before the age of 4 years decreases the risk of penile cancer, yet the risk gradually increases, if circumcision is delayed until adulthood, when almost negligible protective benefit is achieved.[1,3,15] This patient was circumcised at the age of 13 years. In 1990, Vincent[15] showed that circumcision at puberty, although more effective than at adult, does not have the same protective potential as does neonatal circumcision. This delay in circumcision in the native Muslims of south Punjab and Cholistan is very customary, where people delays the occasion to celebrate the circumcision ceremony in a big way. Secondly, they are unaware of the drawbacks of long-standing smegma with poor hygiene under the prepuce, which may lead to the activation of some carcinogen in these groups.[12,15] Why all the males having delayed circumcision do not develop carcinoma is debatable in literature. The incidence of penile cancer in circumcised and uncircumcised adults is even variable in various parts of the world, which strengthens the reports of Hutt[14] that incidence is highly dependent on geographical factors as well, despite the fact that circumcision in infancy in Jews and Muslims almost secures protection from the disease.

Venereal diseases, although play no direct role as an etiological factor for penile cancer[1-3] yet, the role of various viruses and herpetic lesions has been variably reported, which are usually sexually transmitted.[5,6,14,15] The present case report is of a landlord, who was indulged in multiple marriages and sex partners and the possible transmission of any virus or herpetic lesions could be strongly suspected. It is in accordance with the study of Vincent and Redd of 80 cases of penile cancers and the cervical biopsy of their wives with the conclusion that penile cancer has definite association with sexual partners in the presence of cervical caner as well as possible relationship to herpetic infection.[15]

The development of squamous carcinoma of penis is sequentially from a moist or dry wart or nodule over

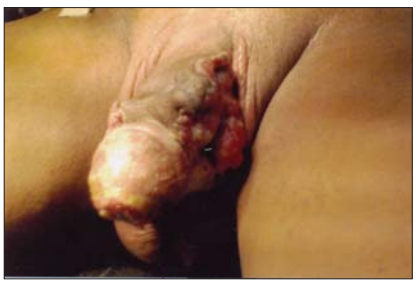

Figure 1: Fungating and ulcerating growth on penis.

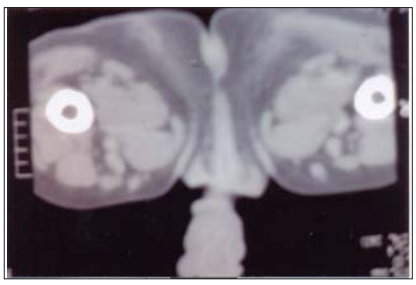

Figure 2: CT scan of penile bulb and inguinal region. Pennile mass is visible. No inguinal lymphadenopathy.

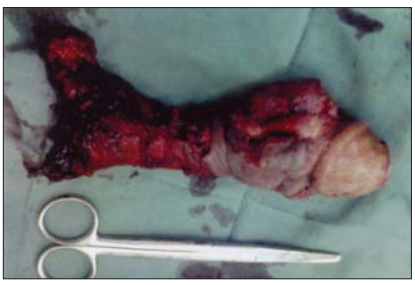

Figure 3: Penectomy with exteriorization of bulbar urethra.

glans or coronal region fulminating to a fungating ulcerative growth destroying the corpora cavernosa and even urethra later on. The precedence of poor urinary stream to retention 3 months before the overt notice of a coronal nodule in this case is highly unusual, which is not seen in previous literature.[1-3,11,13-15] This is in favour of suspicion of a transmitted viral infection as discussed above having association with penile cancer.[15]

There emerged an apparent delay in the diagnosis and management of the case, which was again multi-factorial. Firstly, the presentation was unusual and was managed accordingly. Secondly, the notification of a coronal nodule and then sore was taken lightly by the patient as well as by the urologists. Although the diagnosis of balanitis with stricture urethra was made, but the suspicion of malignancy was delayed, which remained against the reports and suggestions of Goolamali and Pakianathan[4] and Sinha and Katema.[13] Lastly, even after confirmation of the malignancy, the patient delayed the treatment due to reasons best known to him and his spiritual healer. The disease was clinicopathologically of stage II and total penectomy with perineal urethrostomy was carried out without bilateral inguinal lymphadenectomy that was in accordance with the recommendations of Rempelakos, who reported the largest study of 360 cases of penile cancers. Neoadjuvant radiotherapy including both inguinal regions has been planned.[1-3,9,11,15]

There should be a high suspicion of carcinoma penis in differential diagnosis in the patients presenting with even trivial but persistent genital or urethral lesions. So thorough examination and investigations including biopsy is suggested. Neonatal circumcision and abstinence from careless sexual practices can prevent penile cancer. A mass program for public awareness of delayed circumcision and its potential risks is suggested in various media, which will be much helpful in this regard.

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