

·Case Report·

Surgical treatment of a rare case of penile squamous cell carcinoma in a 65-year-old man

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Abstract

Penile squamous cell carcinoma has been commonly reported in the past decades. We describe a rare case of a huge squamous cell carcinoma of the penis in a 65-year-old patient with a 4-year history of tumor growth, for which total penectomy, perineal urethrostomy and bilateral inguinal lymphadenectomy were carried out. We suggest that aggressive surgical intervention should be recommended for those with well-differentiated penile carcinoma regardless of the size of the tumor. (*Asian J Androl* 2007 Mar; 9: 271–273)

Keywords: penis; penile carcinoma; inguinal lymphadenotomy

1 Introduction

Penile squamous cell carcinoma has been commonly documented in the past decades, but reports of huge carcinoma of the penis are rare. With the improvement of living standards and hygienic habits in recent years, the incidence of carcinoma of the penis is declining, especially for penile carcinoma of a large size. Here we describe a rare case of huge squamous cell carcinoma of the penis in a 65-year-old patient with a 4-year history of tumor development, for which total penectomy, perineal urethrostomy and bilateral inguinal lymphadenectomy were successfully carried out.

2 Case report

A 65-year-old man with a 4-year history of penile tumor growth associated with surface ulceration attended the First Affiliated Hospital, Hangzhou, China. The presence of phimosis was observed in the previous decade of his life. A detailed history showed that his symptoms appeared 4 years earlier and he refused any surgical treatments while the tumor gradually grew to a large size with concomitant superficial ulceration, intermittent pain and low fever. However, the patient denied any hematuria and urinary symptoms. Physical examination indicated that the condition of the penis was worse, showing a cauliflower-like tumor of 15.0 cm × 12.5 cm in size associated with foul smelling purulent ulceration involving the skin nearby (Figure 1). Several movable inguinal lymph nodes of 1.0–1.5 cm in size with moderate consistency could be palpated on both sides. The results of laboratory examinations were normal except for leucocytosis. Antibiotics had been administered for 1 week before the operation and the genitalia were cleaned

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Figure 1. Gross appearance of the penis. It looks extremely abnormal with normous cauliflower-like tumor (15.0 × 12.5 cm) and superficial purulent ulceration.



Figure 2. The surgical area after penectomy and perineal urethrostomy were performed with a Foley catheter retained.

repeatedly with 5% povidone-iodine on the eve of surgery. Under continuous epidural anesthesia, total penectomy with perineal urethrostomy and bilateral inguinal lymphadenectomy were carried out after frozen section pathology of biopsy proved to be a well-differentiated squamous cell carcinoma. Subsequently, the left testicle and epididymis were removed because of severe chronic inflammation. Last, the affected area was corrected with well-mobilized vascularized perineal skin flap (Figure2). Postoperative pathological investigations confirmed that it was a well-differentiated squamous cell carcinoma of the penis involving the skin nearby, whereas the surgical margin was negative. Inguinal lymph nodes showed lymphoid inflammatory hyperplasia without metastatic disease. Neither recurrence nor distant metastasis has been observed during a 15-month follow-up visit.

3 Discussion

It has been generally accepted that phimosis and redundant prepuce are risk factors for the development of

penile carcinoma. The incidence of the disease among individuals with phimosis is higher than that among those individuals with redundant prepuce. Tsen *et al.* [1] suggested that phimosis might be strongly associated with invasive carcinoma and not associated with carcinoma *in situ*. Further investigations showed that the pathogenesis of penile carcinoma is correlated with human papilloma virus [2]. Therefore, rigorous preventive management of penile carcinoma is extremely important. In the current case report, the patient ignored the potential risk of the pathogenesis of penile carcinoma. It is generally held that the disease would not have developed if circumcision had been carried out early in the patient's childhood. It is also likely that penile carcinoma could have been diagnosed at its early stage, an organ-sparing procedure being performed accordingly. In some circumstances, penile carcinoma should be differentiated from condyloma accuminata by means of venereal history and pathological characteristics of spinous layer cells hyperplasia and koilocytes [3].

There are a lot of modalities including surgery, chemotherapy, actinotherapy, laser therapy and photo-

therapy for the treatment of penile carcinoma. At present, radical resection of the penis is the primary method [4, 5]. Lymphatic channel is a cardinal route of metastasis. However, most cases of inguinal lymphadenectasis are usually caused by bacteria infection where the penile carcinoma is also easily infected. Thus, it would be difficult to arrange to have a schedule to perform lymphadenectomy. Some investigators believe that the pathologic results of sentinel lymph nodes are very helpful for the diagnosis of distant metastasis and lymphadenectomy decision-making [6, 7]. In the present case, an aggressive total penectomy with perineal urethrostomy was successfully carried out. Removal of the left testis, epididymis and bilateral inguinal lymphadenectomy were carried out at the same session, because of severe chronic inflammation. Fortunately, postoperative pathology indicated lymphoid inflammatory hyperplasia but without metastasis. In a subsequent 15-month follow-up visit, neither recurrence nor distant metastasis has been observed.

The results of a PubMed search suggested that the case we described hereby might be one of the largest penile carcinomas in size so far. We suggest that radical surgical treatment should be considered for penile carcinomas of a large size and well-differentiated squamous

cell carcinoma of the penis, regardless of the size of the tumor if indicated.

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