



## SQUAMOUS CELL CARCINOMA MASQUERADING AS GRANULOMA INGUINALE: A CASE REPORT

### Dermatology

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### ABSTRACT

Squamous cell carcinoma (SCC) is the second most common form of skin cancer, frequent on the sun exposed areas of the body. This report describes a 55 year old male with painful swelling over penis which is gradually increasing in size and bleeds on touch.

### KEYWORDS

Squamous, Metastasis, Horn Pearl

#### INTRODUCTION:

SCC may occur anywhere on the skin and on mucous membranes with squamous epithelium. SCC rarely arises from normal appearing skin. Mostly it arises from sun damaged skin. It is usually seen in middle aged individuals and the elderly. SCC carries a high risk for metastasis, locally invasive with regional lymph node involvement.

Clinically SCC presents as a shallow ulcer surrounded by a wide elevated indurated borders. Often the ulcer is covered by crusts that mask a red granular base. Occasionally raised fungoid verrucous lesions without ulceration occur.

#### CASE REPORT:

A 55 year old male came to the Dermatology OPD with complaints of painful swelling over the penis for the past 7 months. Patient was apparently normal 7 months back when he noticed a small swelling over the penis which gradually increased in size. He had consulted an outside hospital and the lesion was treated as genital warts with cryotherapy. He then started developing more papules over the prepuce and foreskin and an elective circumcision was done. Patient also complained of bleeding on touch. History of dull aching pain over the lesion. History of painful swelling over the lymph nodes. History of exposure to the risk of Sexually Transmitted Infection present 3 years ago. No history of similar lesions elsewhere. No history of trauma. No history of burning micturition or hematuria. No history of weight loss. No history of neurological deficits. No skeletal abnormalities. No visual disturbances. No history of similar lesions in the family.

On examination, an erythematous fleshy plaque present over the anterior aspect of glans penis of skin measuring 2 x 2 cm in size. Similar lesions are present over the coronal sulcus and the ventral aspect of the penis. No discharge from the lesion. Lesion is tender and soft in consistency.

Skin Biopsy was done and histopathological examination showed ulcerated, hyperplastic and dysplastic squamous epithelium with malignant features. Small nests and groups of malignant squamous cells infiltrating into the underlying stroma. Many malignant cells show enlarged vesicular nuclei with prominent nucleoli. Some cells show darker nuclei with individual cell keratinization. Stroma also shows marked inflammatory cell infiltration.

#### DISCUSSION:

SCC is a malignant tumor arising from the keratinocytes of epidermis. SCC of the skin is a heterogeneous disease both etiologically and clinically; with different risk factors implicated in its development in different populations. The common risk factors include Chronic Sun Exposure, Ionizing Radiation, DNA Repair Failure, Immunosuppression

like HIV2 and Organ transplantation, Human Papilloma Virus (HPV 16,18,31,33)3, Chronic Arsenic exposure, Exposure to Industrial Chemicals, Chronic Thermal exposure, Chronic Inflammation. The first evidence of malignancy is induration; the area may be plaque like, verrucous, tumid or ulcerated. But in all cases the lesions feels firm when pressed between the finger and thumb. The limits of induration are not sharp and usually extend beyond the visible margin of the lesion. The different clinical types of SCC are Keratotic Invasive SCC, Nodular SCC, Arsenic Induced SCC, Thermal SCC, Radiation Induced SCC, SCC developing within chronic scars (manifesting as indurated nodule which ulcerates), Oral SCC, Lip SCC, Perioral SCC, Acantholytic SCC, Verrucous Carcinoma, and Genital SCC.

Genital SCC mainly involves the glans penis. The most attributed risk factors include lack of circumcision, poor hygiene, phimosis and recurrent inflammation. Erythroplasia of Queyrat is the premalignant lesion which presents as a shiny, erythematous velvety plaque. Genital SCC may also arise from long standing Lichen Sclerosis et Atrophicus or Leukoplakia. The pre malignant lesion progresses to an indurated plaque or ulcer with associated bleeding; this denotes Invasive SCC. This later enlarges into a fungating mass with local destruction and invasion.

Histopathology shows a tumor with irregular masses of epidermal cells that proliferate downwards into dermis. The invading tumor masses consist of varying proportions of normal and atypical squamous cells. Well differentiated tumors show areas of maturation that form parakeratotic horn pearls; individually keratinized cells and dyskeratosis, with lacunae and lumina that contain shed rounded degenerating cells<sup>4, 5</sup>. The histological variants include Keratoacanthoma like SCC, Spindle cell type, Acantholytic type, Mucinous type, Papillary SCC, Pseudo-vascular type, Signet-ring type, Clear cell, Basaloid, Pigmented, Inflammatory infiltrative, Desmoplastic and Rhabdoid type SCC.

Differential diagnosis for SCC include Actinic Keratosis, Basal Cell Carcinoma, Keratoacanthoma, Bowens disease, Melanoma, Cutaneous Horn, Verruca Vulgaris, Blastomycosis, Chondrodermatitis Nodularis Helicis, granuloma inguinale.

SCC has potential to recur after treatment. The tendency for metastasis depends upon the size, thickness, site, histological type and grade of the tumor. Treatment of SCC includes is mainly surgical. Electrodesiccation and curettage for small superficial lesions<sup>6</sup> on a flat surface like the trunk cheeks or fore head and also for post radiation SCC. Mohs micrographic surgery<sup>7</sup> can also be performed.

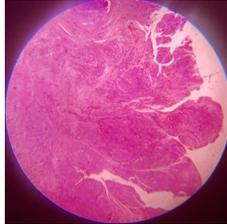
The other commonly used techniques include Cryotherapy, Radiotherapy (Electron beam or Grenz ray), Laser therapy, Photodynamic therapy, Chemotherapy.

**CONCLUSION:**

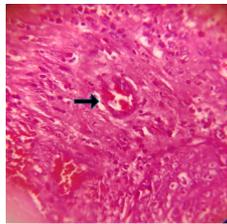
SCC is an invasive tumor which requires early diagnosis and targeted management. The clinical diagnosis of LGV made initially was modified to Penile SCC after confirmation of the same with biopsy and histopathology.



**Figure 1:** Clinical photograph showing erythematous, soft, plaque over the penis.



**Figure 2:** Scanning view microscopy showing proliferation of epidermis into the dermis



**Figure 3:** High power showing horn pearl

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