Adenocarcinoma of Rectum Metastasizing to Penis

N Sukumar, MS*, A Qureshi, FRCS**, *Department of Surgery, Jalan Tenteram, Cheras 56000, Hospital University Kebangsaan Malaysia, **Head of Department of Surgery, International Medical Universiti, Seremban

Introduction
Cutaneous metastasis is rare, more so from carcinoma of the rectum. It indicates advanced disease and carries a poor prognosis. Cutaneous metastasis have been reported to occur in most cancers, however, are more common in cancers of the bone marrow, lymph nodes, skin, lung, breast and uterus. We present a gentleman with carcinoma of the rectum, presenting with penile and groin metastasis.

Case Report
A 75 year old Chinese man was referred to our surgical unit for mass per rectum of two months duration. It was painless and there was no per rectal bleeding. There was no history to suggest malignancy. He also suffered from stroke, hypertension, ischaemic heart disease, diabetic and myasthenia gravis and was on treatment.

Examination revealed a well built man with no obvious general findings. Rectal examination revealed a hard mass at the anal verge, involving the entire circumference, extending proximally for about 3cm into the anal canal. The lesion was fixed and not admitting even the finger. Biopsies confirmed adenocarcinoma. CT scan and chest x-rays revealed no metastasis and the lesion was confined locally. The patient underwent abdominoperineal resection and he recovered well except for perineal wound dehiscence, which eventually healed. Histopathology confirmed a poorly differentiated adenocarcinoma Duke’s C. The tumour was mainly submucosal, extending to the anal squamocolumnar junction. The patient subsequently underwent 6 cycles of chemotherapy of 5-Fluorouracil and Folinic acid. He was given radiotherapy to the perineum.

Summary
An elderly gentleman with adenocarcinoma of the rectum who had abdominoperineal resection presented with scrotal skin and penile metastasis. Adenocarcinoma of the rectum metastasizing to the groin and penis is very rare and few cases have been reported.

Key Words: Carcinoma rectum, Cutaneous metastases
Two months later, he presented with swelling of the penis and scrotum. Examination confirmed subcutaneous edema of the entire scrotum and penis. The liver function tests were normal. The perineum was normal.

A month later, there were multiple cutaneous skin nodules and ulcers over the scrotum and penis, and the skin was inflamed (Figure 1). Skin biopsy confirmed metastatic adenocarcinoma. His condition deteriorated rapidly and he expired two months later.

**Fig 1.:** Cutaneous metastasis from rectal cancer.

**Discussion**

Metastasis is defined as the appearance of neoplasm remote from the site of the primary tumour. Cutaneous metastasis can occur in any cancers but are rare in cancers of the colon and rectum. The incidence of cutaneous metastasis for all types of cancers has been reported to be as high as 9%\(^1\). Most report incidences between 1 and 4%\(^2\). Most lesions occur in patients between 50 to 70 years. Skin metastasis are usually found together with lymph node and organ metastasis. The lesions are normally subcutaneous nodules and are painless. They may mimic epidermal cysts, lipomas, neurofibromas, granulomas or even cellulites. They may also present as alopecia. Cutaneous lesions may manifest even before the primary cancer has been diagnosed. They are usually seen close to the primary tumour and resemble it. Dissemination is by lymphatic or haematogenous route\(^1,2\). Tumour may also spread directly through tissues and mechanically via transport of tumour cells during surgery. The histological features of these cutaneous metastasis are usually similar to those of the primary tumour\(^1,2\). Treatment is often palliative. A solitary lesion may be excised. Excision of these lesions do not prolong survival, but enhance quality of life. Debriment and dressings are most often the only options. A short course of radiotherapy may help in painful lesions. Cryotherapy, carbon dioxide laser therapy and electrochemotherapy may be of value.

Cutaneous metastasis generally indicates widespread and aggressive disease. It carries a very poor prognosis and treatment options are limited. Treatment is usually palliative and the mortality rate is extremely high. Death usually occurs within a few months\(^1,2\).

**References**