Between 2% and 9% of malignant tumours are metastasizing to the skin. Cutaneous metastases from carcinoma of the prostate occur infrequently. Their presence is associated with poor prognosis. We report the case of a 65-year-old man with carcinoma of the prostate, presenting multiple metastases in the scrotal skin region.

Key words: prostate cancer, cutaneous metastases, advanced disease

INTRODUCTION

Primary visceral malignancies uncommonly present with skin involvement, with reported incidence between 2% to 9% 1,2. Mammary, pulmonary, renal and colonic cancers represent the most common sources of secondary cutaneous deposits. Cutaneous metastases originating from urologic tumors occur in 1% of patients with advanced disease. Skin metastases of prostatic origin are extremely rare and are associated with poor prognosis 2.

CASE REPORT

A 65-year-old man, initially presented at the emergency department due to acute urinary retention, has been diagnosed with prostate carcinoma. Prostate specific antigen (PSA) was 221 ng/ml. Bone scan showed multiple osteoblastic metastases of pelvis, ribs and upper part of femur. Histopathological examination after transrectal ultrasound (TRUS) guided biopsy demonstrated prostate adenocarcinoma. The patient underwent combined androgen blockage by buserelin and cyproterone acetate and three months later, the PSA level decreased to 62 ng/ml. Four months afterwards, the patient complained on scrotal skin changes. Clinical examination revealed the presence of multiple papules and nodules in the scrotal skin region, sized from 5 to 20 millimeters in greatest dimension (figure 1).

A biopsy specimen of scrotal skin changes obtained by surgical excision revealed stratified squamous epidermis on the surface, with rows and prostate acini-like glandular structures made from malignant cells, presented in the papillary and reticular dermis (figure 2). Prostate acini-like glandular structures contain lumen and huge anaplastic cells with shining nuclei in the center (figure 3). Two months after, the patient died.

DISCUSSION

Cutaneous and subcutaneous metastases originating from visceral malignancies are associated most frequently with breast, lung, kidney, uterus and colonic cancer, with overall incidence of 5.3% (from 2% to 9%) 3. Despite the high incidence of prostate cancer, cutaneous and subcutaneous metastases of this cancer are extremely rare and seen in less than 1% 3,4. Overall, 436 patients with cutaneous metastases originating from genitourinary tract were reported in the English language literature 3.

The incidence of cutaneous malignancy varies. In a large series of 100 453 cases, there were a total of 77 cases with cutaneous metastases originating from genitourinary tract malignancies in 10.4% 5. Katske et al. identified only one cutaneous metastatic carcinoma of prostatic origin, in a series of 136 017 surgical and postmortem specimens 3. In the recent study of 81 618 cases, Mueller et al. reported 2.9% overall incidence for cutaneous metastases arising from solid visceral malignancies.

The incidence of cutaneous metastases from urologic malignancies was 1.3%. The authors found that skin involvement incidence of kidney, bladder, prostate and testis malignancies was 3.4%, 0.84%, 0.36% and 0.4%, respectively 2. Subcutaneous metastatic sites are even more uncommon then cutaneous, with less than 50 cases reported in the literature 6. Cutaneous metastases of prostatic origin are usually asymptomatic and may occur at single or multiple sites, usually localized to the lower abdomen and genital area 7.
Some uncommon cutaneous metastatic sites, including head, breast and umbilicus, have also been reported\(^7\). Metastatic lesions usually appear as multiple firm nodules or papules and they rarely ulcerate\(^1\). The mechanism for metastasis varies and includes different pathways. Regional spread through tissue, lymphatic and vascular routes, are the most common pathways of dissemination\(^1\). Dissemination can be caused also by mechanical transport of tumor fragments following surgical manipulation of prostate or external-beam radiotherapy\(^10\).

Although cutaneous metastasis may be the first manifestation of prostate cancer, in majority of cases it is a late-developing sign of advanced disease and a poor prognosis, with disease-specific survival less than 6 months\(^2\).6.

**SUMMARY**

**MULTIPLE KOŽNE METASTASE UZNAPREDOVALOG CARCINOMA PROSTATE - prikaz slučaja i pregled literature**


Ključne reči: karcinom prostate, kožne metastaze, uznapreodovala bolest

**REFERENCES**