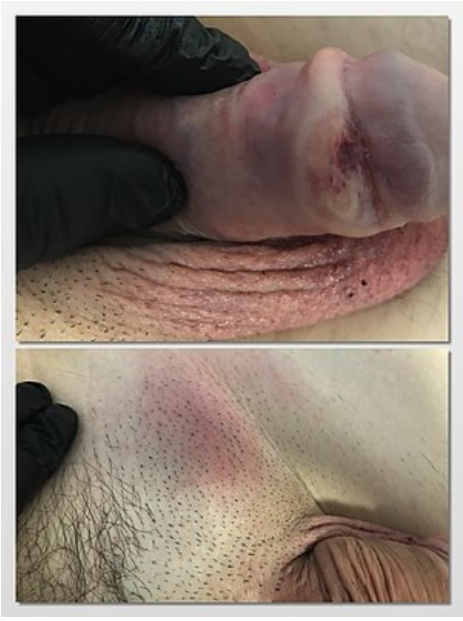
Penile cancer

Penile tumors are rare and account for approximately 1% of all cancers in men. They occur mainly in men aged 60-80 years. We find large geographical differences in the incidence of this disease. We often meet them in Africa and Southeast Asia. In the populations in which circumcision is performed (Jewish population and Muslims), the incidence is negligible. In the Czech Republic, we record approximately 70–80 cases per year (incidence 1.2–1.4 / 100,000). It is more common in lower socio-economic groups.



Penile tumor

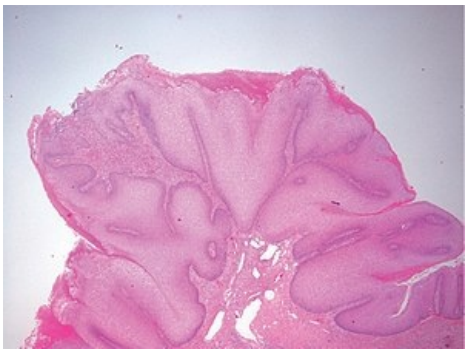
Risk factors

Phimosis. is a major risk factor . This also limits the possibility of organ hygiene and also explains the geographical differences in the populations where circumcision is performed. Smegma, which contains carcinogens, accumulates in the foreskin sac. Other risk factors include human **papillomavirus** infections (type 16,18). We can also include chronic irritation asbestos exposure , nicotinism, partner rotation and young age at first sexual intercourse.

Among precancerous belong cutaneous horns, sclerotica balanitis obliterans. These are precultural precancerous lesions, with a lower risk of developing penile cancer. high-risk cancers include leukoplakia, Queyrat's erythroplasia, Bowen's disease, and PeIN (penile intraepithelial neoplasia). [1]

Histology

Histologically, 95% of tumors are squamous cell carcinoma. The rest are, for example, Merkel cell tumors (mechanoreceptors found in the *stratum basale epidermis* and external epithelial sheath of the hair follicle), small cell carcinomas, basal cell carcinomas and melanomas. Vyskytují se také Tumors of mesenchymal origin also occur - melanosarcoma, fibrosarcoma and angiosarcoma (rare).



Micrograph of penile verrucous carcinoma

Classification

Jacson stages:

- **I. (A)** − glans penis, foreskin
- **II. (B)** − grows into cavernous bodies
- **III. (C)** − operable lymph nodes
- **IV. (D)** − ingrowth into surrounding structures, inoperable inguinal nodes, distant metastases

TNM classification: *T - primary tumor*

- Tx primary tumor cannot be assessed
- This is without signs of a primary tumor
- TIS carcinoma in situ
- The non-invasive verrucous carcinoma
- The T1 tumor infiltrates the subepithelial connective tissue
- The T2 tumor spreads to the corpus spongiosum or corprora cavernosa
- T3 tumor infiltrates the urethra or prostate
- The T4 tumor spreads to other surrounding structures

N - Regional lymph nodes

- Nx regional nodes cannot be evaluated
- N0 without metastases in regional nodes
- N1 metastasis in one superficial inguinal node
- N2 metastases in multiple superficial inguinal nodes (unilateral or bilateral)
- N3 metastases in deep groin or pelvic nodes unilateral or bilateral

M - distant metastases

- The presence of metastases cannot be assessed
- M0 no distant metastases
- M1 presence of distant metastases.[1]

Symptomatology

Tumors most often manifest themselves as skin lesions (induration, erythema, ulceration, small nodule, exophytic tumor) on a gland with almost always enlarged inguinal nodes. [1] Sometimes it may not be noticeable for severe phimosis, then we can only see secretion from the foreskin sac.

Diagnosis

Diagnosis is based on:

- anamnesis and physical examination,
- cytological and histological examination,
- USG,CT, MRI are used for staging

A biopsy of the primary lesion is essential for diagnosis.

Examination of the descending nodes is a major problem in penile cancer. We examine them both palpation and USG in the case of inguinal nodes or CT in the case of pelvic nodes. Among other important steps is the evaluation of the positivity of the so-called **sentinel node**, ie the first lymph nodes in the given direction from the cancer. It consists in the application of a patent blue or radiolabelled substance to the tumor area and the perioperative identification of the sentinel node. If we apply a radioactive substance, we identify the sentinel nodes using a gamma camera. She is then examined by a pathologist and, if positive, we supplement pelvic lymphadenectomy.

The regional nodules for the penis are inguinal (inguinal), both superficial and deep, and subsequently pelvic, especially obturator and along the internal iliac artery.

((Note: Essential for the exam.)

Therapy

By scope and location:

- circumcision, cryodestruction, laser ablation,
- penile resection with alternative actinotherapy, emasculinization (radical penile amputation + bilateral orchiectomy + scrotectomy)
- inguinal lymphadenectomy,
- systemic chemotherapy - bleomycin, cisplatin, 5-fluorouracil (in case of generalized disease with distant metastases).

Related Articles

- Penis
- Precancerosis

References

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