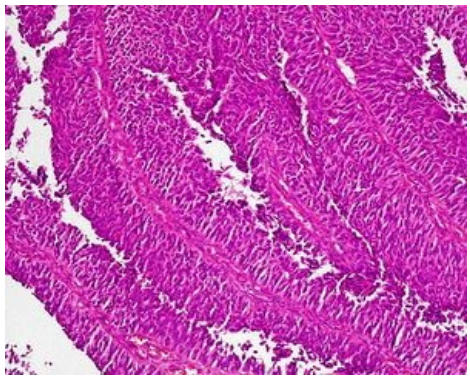
Cancer of the bladder

This article has been translated from WikiSkripta; ready for the **editor's review**.

Currently, they make up more than 2 % of newly diagnosed malignant tumors.


Highly differentiated urothelial carcinoma

Epidemiology

- Morbidity is still increasing, mortality is decreasing, it affects **3x more often men**,
- high incidence – in SW Europe, low in India and Japan,
- the main occurrence is between 50 and 70 years.

Etiology

- The main risk factor is **smoking** (mainly smoking black tobacco),
- exposure to some industrial pollutants – **aromatic amines** (benzidine, 2-naphthylamine, ...),
- chronic infection, in endemic areas – schistosomiasis (does mainly squamous cell ca).

Clinical Manifestations

- Hematuria and polakisuria,
- increased bladder irritability is indicative of throat involvement, hydronephrosis and secondary pyelonephritis may occur in the case of involvement in the area of the mouth of the ureters,
- sometimes it can be completely asymptomatic,
- general symptoms (loss of appetite, weight loss, anemia) - they only occur in very advanced tumors.

Diagnostics

1. Cystoscopy,
2. endoscopic biopsy, possibly transurethral resection → this is absolutely necessary to determine the stage.

Histopathology

- 97 % are **carcinomas of the urothelium**, rarely **adenocarcinomas** and **undifferentiated carcinoma**, **squamous cell** is endemic (schistosomiasis),
- macro - different appearance - papillary, infiltrating, about ¼ arise multicentrically (this is the cause of frequent recurrences),
- may begin as ca in situ and then progress to a ***papillary*** or an ***infiltrating*** form,
- initially the tumor grows in the mucosa, then early on it grows into the submucosa, muscle and surrounding fat, it metastasizes to the **pelvic** nodes, later the **para-aortic** nodes, rarely hematogenously.

Treatment

The method of therapy depends on a careful evaluation of the histology, the degree of invasion, the extent of the disease.

Surgical treatment

- Non-invasive tumors can be treated by **transurethral resection (TUR)** - it is a relatively less damaging procedure, it does not affect the function of the bladder,
- to treat surface structures - **coagulation** or **laser vaporization**,
- but relapse often occurs within 1 year, therefore the five-year survival rate does not exceed 80 %,
- that is why it is recommended to add adjuvant intravesical CHT, intravesical application of IFN, BCG vaccine, adriamycin, irradiation,
- if the tumor grows into the muscle - **partial cystectomy**,
  - the rationality of this procedure is questioned due to the multifocal origin of urothelial tu,
  - in addition, there is a risk of implantation meta, that is why it is practically not carried out today,
- for more extensive tumors - **radical cystectomy with lymphadenectomy**, in men with prostatectomy in women with hysterectomy, adnexectomy,
  - it is a very demanding performance and its indications must be carefully considered.

Radiotherapy

- Most often as external irradiation, it is not used as a separate treatment, for numerous NU,

- even as a neoadjuvant, a significant effect was not confirmed,
- radiochemotherapy (RCHT) might have a good effect so far, but this is not supported by studies,
- is, however, irreplaceable as palliation (meta analgesia to the skeleton, suppression of hemorrhagic complications).

Chemotherapy

- Administered either **locally** or **systemically**,

1. local – for diffuse ca in situ, for superficial tumors after TUR and for papillary ones (the most advantageous nowadays is **mitomycin C**, which is practically not absorbed from the bladder and does not pose a threat of toxicity),
2. systemic – the main **palliative treatment** of advanced forms, the tumor responds to a number of cytostatics,

- corresponds most to – **Pt derivatives, anthracyclines, ifosfamide**,
  - adjuvant CHT – very useful especially in cases of involvement of nodes,
  - neoadjuvance – has many disadvantages, it is not done as standard.

Photodynamic therapy

- It can be effective in ca in situ and in papillary ca.

Immunotherapy

- Mainly in the form of **local application BCG**.

Prognosis

- For non-invasive, 5-year survival is 75-80 %.

Links

Related Articles

- Kidney tumors
- Kidney carcinoma

External links

- Template:Mefanet

Source

- BENEŠ, Jiří. *Study materials* [online]. ©2010. [cit. 2010-06-16]. <http://jirben.wz.cz>.