

Bladder Cancer

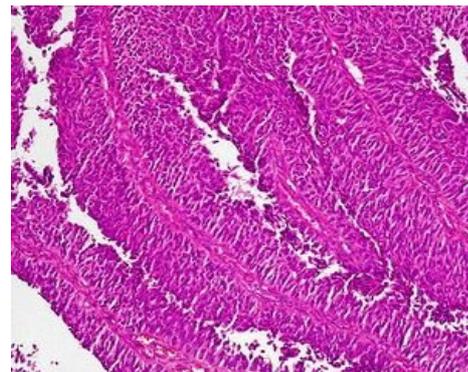
They currently make up more than 2% of newly diagnosed malignancies.

Epidemiology

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

Etiology

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



Highly differentiated urothelial carcinoma

Clinical manifestations

- Hematuria and pollakiuria ,
- increased bladder irritation indicates involvement of the throat, hydronephrosis and secondary pyelonephritis may occur in the area of the urethral orifice ,
- sometimes it can be completely asymptomatic,
- general symptoms (anorexia, weight loss, anemia) - are only in very advanced tumors.

Diagnostics

1. Cystoscopy ,
2. endoscopic biopsy , or transurethral resection → it is necessary to determine the level.

Histopathology

- 97% are **carcinomas from the urothelium** , rarely **adenocarcinomas** and **undifferentiated carcinomas** , **squamous cell** carcinomas are endemic (schistosomiasis),
- macro - different appearance - papillary, infiltrating, probably in $\frac{3}{4}$ they arise multicentricly (this is the cause of frequent recurrences),
- they can start as ca in situ and then change into a **papillary** or **infiltrating form**,
- initially the tumor grows in the mucosa, then grows early into the submucosa, muscle and surrounding fat, metastasizes to the **pelvic nodes** , later **paraortic** , more rarely hematogenously.

Therapy

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

Surgical treatment

- Non-invasive tumors can be treated by **transurethral resection (TUR)** - it is a relatively minor damaging procedure, it does not affect bladder function,
- for the treatment of surface structures - **coagulation** or **laser vaporization** ,
- but often there is a recurrence within 1 year, so the five-year survival does not exceed 80%,
- therefore, it is recommended to supplement 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 given the multifocal origin of urothelial
 - moreover, there is a risk of implantation targets, so it is practically not implemented today,
- for larger 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

- It is most often not used as an external radiation, as a separate treatment, for numerous emergency services,
- even as a neoadjuvant , no significant effect has been confirmed,
- So far, radiochemotherapy (RCHT) could have a good effect, but this is not substantiated by studies
- however, it is irreplaceable as palliation (skeletal meta analgesia, suppression of hemorrhagic complications).

Chemotherapy

- It is administered either **locally** or **systemically** ,
1. local - in diffuse ca in situ, in superficial tumors after TUR and in papillary (the most advantageous today seems **mitomycin C** , which is practically not absorbed from the bladder and does not endanger 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 for nodal involvement,
 - neoadjuvance - has many disadvantages, it is not done by default.

Photodynamic therapy

- It can act in ca in situ and in papillary ca.

Immunotherapy

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

Prognosis

- In non-invasives, 5-year survival is 75-80%.

Links

related articles

- Kidney tumors
- Kidney cancer

External links

- Urolithiasis, urooncology, retroperitoneal diseases, lower urinary tract diseases

Source

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