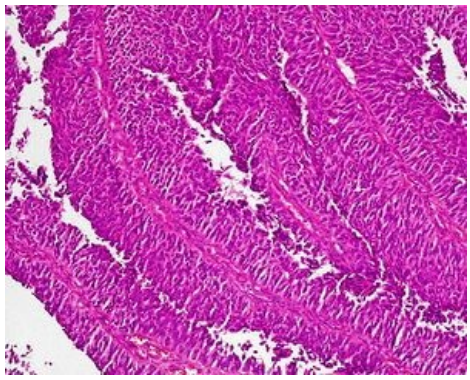
Bladder carcinoma

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


Highly differentiated urothelial carcinoma

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 50 and 70 years.

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 (mainly squamous cell carcinoma).

Clinical manifestations

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

Diagnosis

1. Cystoscopy,
2. endoscopic biopsy, eventually transurethral resection → this is necessary to determine the progress

Histopathology

- 97% are **urothelial carcinomas**, rarely **adenocarcinomas** and **undifferentiated carcinomas**, **squamous cell carcinoma** is endemic (schistosomiasis),
- macro - different appearance - papillary, infiltrating, probably in 1/4 they arise multicentricly (this is the cause of frequent recurrences),
- they can start as ca in situ and then change to a **papillary** or **infiltrating** form,
- initially the tumor grows in the mucosa, early into the submucosa, muscle and surrounding fat, metastasizes to the **pelvic** nodes, later **paraaortic**, more rarely hematogenously.

Treatment

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 with **transurethral resection (TUR)** - it is relatively non-intrusive, it does not affect bladder function,
- for the treatment of surface structures - **coagulation** or **laser vaporization**,
- often, however, recurrence occurs 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 muscle - **partial cystectomy** is determined,
  - the rationality of this procedure is questioned due to the multifocal origin of urothelial tumor
  - in addition, there is a risk of implantation metastases, so it is practically not performed today,
- for larger tumors - "radical cystectomy with lymphadenectomy", in men with prostatectomy, in women with hysterectomy, adnexectomy,
  - it is a very demanding procedure and its indications must be carefully considered.

Radiotherapy

- Most often as external irradiation, it is not used as a separate treatment, for numerous emergency services,
- even as neoadjuvance no significant effect has been confirmed,
- so far radiochemotherapy (RCHT) could have a good effect, but this is not based on studies,
- however, it is irreplaceable as palliation (skeletal meta analgesia, suppression of hemorrhagic complications).

Chemotherapy

- Served either **locally** or **systemically**,

1. local - in diffuse in situ carcinomas, in superficial tumors after TUR and in papillary carcinomas (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** advanced forms, the tumor responds to a number of cytostatics,

- most similar 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

- This can work in "in situ" carcinomas and in papillary carcinomas.

Immunotherapy

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

Prognosis

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

Links

Related links

- Kidney cancer
- Kidney carcinoma

External links

uroonkologie, onemocnění retroperitonea, onemocnění dolních cest močových (http://mefanet.lfp.cuni.cz/clanky.php?aid=107%7CUrolitiáza,)

Source

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