

Oesophageal tumors

1. Benign - most often leiomyoma.
2. Malignant - squamous cell carcinoma (90%), adenocarcinoma and melanoblastoma (10%).

Benign esophageal tumors

1. Intramural (solid or cystic) - leiomyoma , fibroma , lipoma , hemangioma , congenital or retention cysts .
 2. **Intraluminal** (stalked or sessile polyps) – adenoma, papilloma, fibrolipoma, myxoma.
- They do not usually cause problems, rarely bleeding or dysphagia ;
 - Endoscopic or X-ray diagnostics (contrast agent passage);
 - Indications for removal are clinical difficulties or the impossibility of eliminating malignancy - it is performed endoscopically, enucleation of intramural tumors or. wedge resection from thoracotomy or thoracoscopically.

Malignant tumors of the esophagus

- Oesophageal cancer is most common between 50-70. year, more in men, the highest incidence is in China;
- Risk factors are exogenous (smoking, alcohol, spicy diet, vitamin deficiency) and endogenous (precancerous lesions - hiatal hernia , Barrett's esophagus , achalasia , Plummer-Vinson syndrome , strictures after burns);
- The prognosis for 5-year survival is 10%.

Microscopy



Squamous cell carcinoma of the esophagus, endoscope view.



Squamous cell carcinoma of the esophagus (same patient), view with an endoscope after using Lugol's solution, which will better clarify the extent of the lesion.

- 90% dlaždicobuněčný karcinom;
- 10% adenokarcinom (hlavně distální jícnu a GE junkce na podkladě Barrettova jícnu); v současnosti převažuje adenokarcinom.
- Melanoblastom.

Macroscopy

- The tumor may be *exophytic* (polyp), planar infiltrating (circular narrowing of the esophageal lumen followed by longitudinal submucosal spread) or *ulcerative* ;
- The most common are tumors in the middle thoracic esophagus;
- Difficult differentiation of terminal esophageal tumors from cardiac tumors (esophageal adenocarcinoma is considered to be one in which more than 80% of the volume is located in the esophagus) - tumors in this area are divided into:
 - Type:
 - type I – ca in the distal (Barrett's) esophagus;
 - type II – ca cardia;
 - type III – subcardial (fundus) ca.



Barrett's esophagus

TNM classification

- T1 – mucosa or submucosa;
- T2 – external muscular infiltration;
- T3 – adventitia infiltration;
- T4 – passing into the surroundings;
- N1 –regional nodes (cervical in the cervical section of the esophagus, mediastinal and perigastric in the

- thoracic section);
- M1 –distant metastases.

Spread of esophageal cancer

- Continuous - per continuity to the surroundings (trachea - fistula with aspirations and bronchopneumonia, mediastinum, lungs, pleural and pericardial cavity);
- Lymphogenically - mediastinal and paratracheal nodes, under the diaphragmatic gastric nodules;
- Hematogenously - liver , lungs , rarely bones and CNS.

Clinical picture

- Progressive dysphagia a odynophagia (late symptom);
 - dysphagia initially for a solid diet (unlike achalasia, where fluid passage is disrupted and the solid diet passes);
- Retrosternal pain, weight loss, anemia , aspiration pneumonia

Diagnostics

- Biopsy endoscopy;
- CT of the chest and abdomen (tumor extent, distant metastases);
- EndoUZ (tumor growth into the environment, nodal involvement);
- Staging (distant metastases - PET / CT, lung X-ray, liver ultrasound, skeletal scintigraphy);
- Others - X-ray passage of the contrast agent through the esophagus, NMR, bronchoscopy (tracheobronchial invasion is a contraindication to esophagectomy);
- Laboratory examination: tumor markers CEA , SCC .

Therapy

Surgical and endoscopic

Radical

- Tumors of the Tis or T1 stage can be treated by endoscopic mucosectomy;
- For more advanced tumors different types of esophagectomies (for tumors in the GE junction with different types of gastrectomies - total gastrectomy or just cardiac resection) with mediastinal and celiac lymphadenectomy and esophageal replacement with tubular stomach , colon or small intestine, resections can be performed classically from thoracic and laparotomy or only from the cervical approach and laparotomy with esophageal stripping transhiatally (in high-risk patients, where thoracotomy is thus avoided), possibly also by video-assisted thoracoscopy;
- Contraindications to esophagectomy are distant metastases and tumor ingrowth into the tracheobronchial tree.

Palliative:

- Dilatation of tumor stenoses:
 - laser recanalization (recurrences occur after it);
 - stent placement - coated expandable stent (currently the best option);
 - Haring's endoprosthesis (no longer used today, a number of complications including esophageal wall pressure ulcers);
- Paliativní bypassy – žaludek, střevo;
- Gastrostomy (surgical or endoscopic - PEG).

Radiotherapy

- Low radiosensitivity (more in squamous cell carcinoma);
- Neoadjuvant (improvement of operability) and adjuvant (removal of residues) are performed, as well as in inoperable tumors;
- Brachyradiotherapy is also used (palliatively to clear stenoses).

Chemotherapy

- Low sensitivity;
- The combination of cisplatin with 5-fluorouracil is most commonly used;
- It is performed neoadjuvantly and adjuvantly.

You can find more detailed information on the Cytostatics page . Iron

Photodynamic treatment

- Activated porphyrin is taken up selectively by the tumor tissue, and oxygen radicals causing tumor necrosis are formed after laser irradiation ;
- He's also being tested on Barrett's esophagus.

Summary video



Links

related articles

- Diseases of the esophagus
- Esophageal reflux disease

Source

- PASTOR, Jan. *Langenbeck's medical web page* [online]. [cit. 2009]. <<http://langenbeck.webs.com>>.