Tumors of the pancreas

- **benign tumors** occur very rarely
  - lipoma, cystadenomas, dermoid cysts, teratomas , apudomas
  - cystadenomas tend to malignate, they are removed
- **malignant tumors** – we distinguish ampular tumors and then pancreatic cancer

Regional pancreatic lymph nodes

- upper group - overhead and body
- lower group - under the head and body
- anterior group - pancreatoduodenal, pyloric and proximal mesenteric nodes
- posterior group - posterior pancreatoduodenal, pericholedochal, mesenteric
- lienal group - nodules in the hilus of the spleen

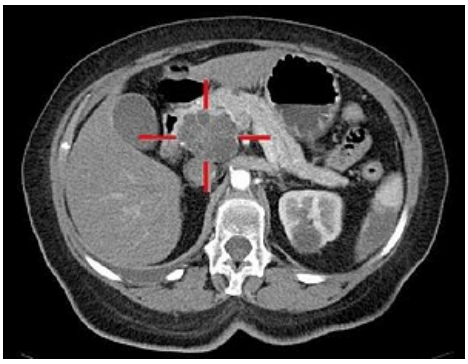
Ampullar (periampullar) tumors

- most often it is a well-differentiated adenocarcinoma with papillary exophytic manifestations
- used to be a rare rarity, today it is the fifth most common cause of cancer death
- affects people over 50 years of age
- prognostically favorable is that it soon manifests as obstructive jaundice - therefore it is indicated up to 4 times more *often for resection than pancreatic head cancer
- metastases occur later

Carcinoma

🔎 *For more information see Pancreatic carcinoma.*

- according to the location we recognize - carcinoma of the head, body and cauda pancreas
- occurrence
  - is increasingly common (currently about 2 times more than in the interwar period)
  - make up over 10% of GIT malignancies, over 3% of all malignancies
- causes - a number of predisposing factors are known - obesity , alcohol, smoking , DM , biliopancreatic reflux, chronic pancreatitis
- localization - 65-70% is in the head, 15% in the body, 5% in the cauda area
- histology - 90% are adenocarcinomas of the ductal epithelium, acinar cell carcinoma has a very poor prognosis



Pancreatic head carcinoma after contrast application of CT

stages of the tumor process

- stage I - T1 or 2, N0, M0
- stage II - T3 (infiltration into the stomach, blood vessels), N0, M0
- stage III - any T, N1, M0
- stage IV - any T, N, but M1

Clinical picture

- initially presents as:
  - "discomfort" syndrome - anorexia, fullness, weight loss and indigestion
  - these symptoms should lead to the suspicion of pancreatic malignancy
- pain - in the abdomen and banded in the back
- in head tumor - obstructive jaundice - typical painless onset

Diagnosis

Imaging methods are crucial in diagnosis:

- contrast X-ray - typical enlargement of the duodenal window "C"
- USG - identifies the tumor mass, enables FNAB
- ERCP - imaging functions and pancreatic juice collection for cytology
- CT
- arteriography - important for determining tumor operability (infiltration of ports or mesenterics - almost this precludes radical performance)
- oncomarkers - CEA, CA 19-9, CA 50
- differential diagnosis(dif.dg) - benign tumors, pancreatic pseudocysts, chronic pancreatitis

Therapy

Therapy is optimally surgical:

- Whipple surgery - in case of head injury - cephalic partial duodenopancreatectomy
- cauda involvement - left resection of the pancreas
- total duodenopancreatectomy, tube connection gastrojejunoanastomosis
- palliative:
  - in bile duct oppression - biliary anastomoses (see above)
  - at imminent duodenal oppression - gastrojejunoanastomosis
- postoperative measures - glycemic control , or iatrogenic DM therapy - **this diabetes is very difficult to control due to the absence of glucagon! - great tendency to hypoglycemia !!!**
- pancreatic enzyme substitution
- adjuvant - percutaneous conventional RT, it is not very sensitive to CHT, it is used only palliatively

Prognosis

- very unfavorable, operational lethality is 5-15%
- in early diagnosable cancer, 5-year survival is still only 3%

Links

Source

- BENEŠ, Jiří. *Studijní materiály* [online]. [cit. 6.5.2010]. <http://jirben.wz.cz>.