Pain in oncology

- Pain is one of the most common symptoms that accompanies cancer.
- In a quarter to a half of patients, pain is the first symptom.

Etiology of cancer pain

- Direct tumor invasion (70%) - skeletal involvement, invasion or compression of nerve structures, obstruction of hollow organs or outlets, invasion of blood vessels or obstruction of blood vessels, ulceration, mucosal infiltration.
- In connection with treatment (20%) - diagnostic and staging examinations, postoperative pain, radiation pain (stomatitis, esophagitis, spinal cord injury), after chemotherapy (neuropathic, stomatitis, hemorrhagic cystitis, ...).
- In a more distant context (below 10%) - paraneoplastic pain (hypertrophic osteoarthropathy), pain associated with low performance and self-sufficiency (bedsores, constipation), ...
- Pain of non-tumor origin (10%).

Esophageal cancer, CT scan with contrast, coronal image

Examination of pain

- We determine the location, character, propagation, and changes in intensity over time.
- Intensity:
  - visually analog curve - a line 10 cm long, its left end indicates "no pain" and the right "worst imaginable pain", the patient marks the value on the curve that corresponds to his pain;
  - Melzack scale - the patient classifies pain as mild, uncomfortable, strong, cruel, unbearable.

Pain treatment

- The procedure varies according to the type and intensity.
- In the first place, it is necessary to treat the cause of the pain.
- Palliation leads to a reduction in analgesic consumption in many tumors (we gain temporary control over the tumor).
- We achieve symptomatic relief in 80% orally, in 10% the intervention of an anesthesiologist or surgeon is necessary, in about 10% it is not possible to achieve optimal relief.
- The optimal pain relief is a reduction in the intensity of approximately 90%.
- Complete removal is usually only possible at the cost of significant patient sedation.

Analgesics

Treatment scheme

- First grade - NSAIDs (Non-steroidal anti-inflammatory drugs) and analgesics-antipyretics.
- Second grade - weak opiates (codeine, dihydrocodeine, propoxyphene, oxycodone, tramadol).
- Third grade - strong opiates (morphine, fentanyl, buprenorphine).
  - Anticonvulsants and muscle relaxants are effective in neuropathic pain.
  - Neuroleptics increase the pain threshold.
  - Antidepressants eliminate painful psychosyndrome, fear, paraesthesia, improve sleep.
  - The combination of opiates and NSAIDs has an additive effect.
  - The antiedematous effect of corticoids, also bisphosphonates, is used for bone metastases.
  - Analgesics are given at fixed intervals, the next dose is given before the effects of the previous one subside.
  - We preferably use p.o. treatment.
  - External analgesic radiation can also be used for bone metastases, and brain meta can also be affected.
  - Use of 89Sr (strontium) - useful in multiple skeletal metastases, in functional marrow (the main emergency is thrombocytopenia).
  - Pharmacologically uncontrollable pain - epidural or subarachnoid anesthesia, neurolysis, or neurosurgery.

Links

Related articles

- Pain
- Analgesics

- Antidepressants

External links

- Cancer pain treatment - interactive algorithm + test (https://www.akutne.cz/index.php?pg=vyukove-materialy--rozhodovaci-algoritmy&tid=212)

Sources

- BENEŠ, Jiří. *Studijní materiály* [online]. ©2012. [cit. 25. 4. 2012]. <http://jirben2.chytrak.cz/materialy/onko_JB.doc>.