

USPSTF – ProstateCancer- Infographic

Prostate cancer (prostate cancer, prostate cancer) takes the second place in men in terms of maturity and mortality from malignant tumors. The number of prostate cancer diagnoses is increasing in most developed countries of the world, mainly as a result of the prevalence of serum PSA in people without clinical signs of prostate cancer (so-called screening), due to increased health awareness and increased life expectancy of men.

In Poland, the incidence of prostate cancer has doubled in the last 10 years. 23 June is national prostate cancer awareness day.

On this occasion, the following article prepared in collaboration with experts in the field of UroOncology contains up-to-date information on the symptoms of prostate cancer, treatment standards and prognosis in the disease. Prostate cancer – symptoms a key role in the early detection of prostate cancer is played by knowledge of the alarming symptoms and potential signs of prostate cancer, the occurrence of which should be a signal for urgent consultation with a urologist. Some patients have lower urinary tract complaints and some disturbing symptoms, which are rather a consequence of the coexistence of benign prostatic hyperplasia.

Sometimes the first symptom of prostate cancer in the generalized stage is bone pain caused by tumor metastasis. Prostate cancer in the vast majority of cases (>75%) is diagnosed at an early stage of development. At this stage, the cancer does not cause specific clinical symptoms or can be confused with another disease. The most common symptom of prostate cancer is difficulty urinating and frequent urination.

Any man with such symptoms should be examined by a urologist. It happens that a growing tumor does not cause these symptoms of prostate cancer, but symptoms associated with infiltration of surrounding tissues or metastasis of cancer to the bone (pain, pathological fractures, anemia) and the lymph nodes of the hips lead to the diagnosis. Early symptoms of prostate cancer at an early stage of prostate cancer development, due to the fact that adenocarcinomas usually develop in the posterior peripheral zone of the gland, the alarming symptoms of prostate cancer usually do not occur.



Men with benign prostatic hyperplasia develop problems caused by a sublingual obstruction, which are completely independent of the developing cancer. The most common symptoms of locally advanced prostate cancer are the effects of sublingual obstruction. Very few patients develop haematuria, urinary tract infections and severe secondary infection to the sublingual barrier.

Symptoms of prostate cancer rarely in patients with massive involvement of lymph nodes appear swelling of the lower extremities. Men with bone metastases often have symptoms of prostate cancer such as pain, less commonly weakness in the muscles of the lower limbs, or prostate cancer symptoms associated with paralysis caused by compression of the spinal cord. Bone metastases of prostate cancer usually occur in the spine, ribs, pelvic bones and skull, and in the base of the long bones. A symptom of advanced prostate cancer in this situation can be severe pain.

HOW TO DETECT PROSTATE CANCER?

Determination of serum PSA concentration is essential for the diagnosis of prostate cancer, although it should be emphasized that this marker is not specific for prostate cancer – its concentration also increases due to benign prostatic hyperplasia and prostatitis. An elevated serum concentration of the PSA cancer marker in a person with suspected cancer cannot be considered as an unequivocal symptom of prostate cancer.

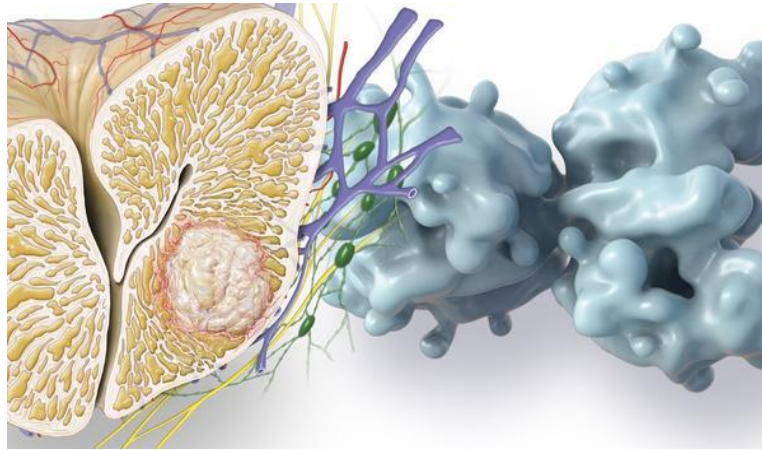
The following PSA values were taken as standard depending on age: 2.5 ng/ml up to 49 years of age, 3.7 ng/ml up to 54 years of age, 4.0 ng/ml up to 59 years of age, 5.4 ng/ml up to 64 years of age. and 6.6 ng / ml up to 74 years of age. According to recent scientific reports, there is controversy as to whether PSA-based prostate cancer screening and per-rectum screening and treatment of early prostate cancers have an impact on reducing mortality and extending the life of patients.

The National Cancer Institute in the US believes that the impact of PSA screening on reducing mortality from such a insidious disease as prostate cancer has not been proven. The American Society of Clinical Oncology (ASCO) recommends that the validity of PSA testing be discussed individually with men whose expected survival is 10 years.

PROSTATE CANCER – DIAGNOSIS

In some patients prostate cancer can be detected on the basis of finger examination through the rectum. However, the diagnostic value of this test is limited and depends on the investigator's experience. It is advisable to perform transabdominal ultrasonography (Taus), which assesses the urinary system, and transabdominal ultrasonography (trus) with a high sensitivity probe to detect non-palpation foci of prostate cancer.

Percutaneous ultrasound allows you to visualize the border and internal structure of the prostate gland. Abnormal trus result is found in about 20% of patients with prostate cancer. Trus examination is the most accessible and common tool for direct imaging of the prostate.



COMPUTED TOMOGRAPHY IN THE DIAGNOSIS OF PROSTATE CANCER

In some cases, it is recommended to conduct studies to assess the local clinical progress of prostate cancer and, except for tumors with a low risk of spreading, the presence of metastases of prostate cancer (computed tomography of the pelvis, chest x – ray, bone scintigraphy, positron emission tomography).

Bone scintigraphy is the most commonly used method for assessing the presence of bone metastases when a diagnosis of prostate cancer is suspected. Bone scintigraphy is generally not indicated in patients with PSA concentrations below 20 ng / ml. Positron emission tomography (PET) imaging remains a valuable alternative to scintigraphy.

MAGNETIC RESONANCE IMAGING FOR PROSTATE CANCER

An imaging study useful in cases of locally advanced cancer is the multiparametric magnetic resonance imaging (mpmr). In addition to classical radiological morphology, metabolism, tissue perfusion and water diffusion are evaluated. Mpmr is used both in the diagnosis of primary lesions to determine the degree of progression of prostate cancer and in the diagnosis of local recurrence of prostate cancer.



TREATMENT OF PROSTATE CANCER

The choice of optimal therapy and recommended treatment in case of diagnosis: prostate cancer depends primarily on the interpretation of the results of the above-mentioned diagnostic tests, the degree of progression of prostate cancer, the pathomorphological characteristics of the tumor, the assessment of the serum PSA marker, the symptoms of prostate cancer, as well as the age and general health of the patient.

Given the differences in the biology of prostate cancer, decisions about the treatment of prostate cancer are made taking into account the expected survival time and factors that make it possible to classify the cancer into one of three groups: low-risk prostate cancer, intermediate-risk prostate cancer, high-risk prostate cancer.

PROSTATE CANCER-ACTIVE SURVEILLANCE

In the case of low-risk prostate cancers, an active surveillance approach can be adopted. Immediate radical treatment of prostate cancer of this group of patients may not only not prolong their life, but is fraught with the risk of complications. Anti-cancer treatment is started when the doctor determines the progression of the disease.

SURGICAL TREATMENT OF PROSTATE CANCER

Radical surgical treatment of prostate cancer is used in patients with a tumor limited to the prostate gland. Surgical procedures used in the case of prostate cancer are radical prostatectomy, open from the nasal access or laparoscopic removal of the prostate gland along with the seminal vesicles and lymph nodes.