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Information for Patients

Prostate Cancer: The Earlier the Diagnosis, the Better the Chances of Recovery



Most frequent form of cancer among men

Around 60,000 men in Germany contract prostate cancer each year.

Prostate cancer is the most frequent form of cancer among men in Germany and also the second most frequent cancer that ultimately proves fatal. Around 60,000 men are diagnosed with prostate cancer each year. Their average age is 69. Overall, around 40 percent of men in western industrialised countries are at risk of contracting prostate cancer at some stage in their lives. But only approximately 10 percent of them experience symptoms and just 3 percent succumb to the disease. The more frequent performance of screening has led to prostate carcinoma being detected at an increasingly early stage – improving the chances of recovery and the likelihood of survival.

Symptoms emerge in the later stages

The disease usually remains unnoticed during the early phase. The tumour grows slowly. Often the symptoms will not make themselves felt until metastases have formed or the tumour cells have invaded the neighbouring tissue.

These indications may be observed:

- Symptoms during urination: delayed start, longer duration with a weak jet, dribbling or interruption of flow, frequent micturition with small volumes of urine, nocturia or pain
- Pain of the spinal column and the pelvis caused by metastases, and even spontaneous bone fractures without injury
- Erectile dysfunction or traces of blood in the sperm

The earlier the diagnosis, the better the chances of recovery

Men in Germany above the age of 45 are entitled to annual screening by a urologist as part of the statutory health insurance services. The examination is recommended from the age of 40 if there is a family history of prostate cancer. The urologist enquires after possible symptoms and palpates the sexual organs and lymph nodes on the groin. In addition,

the prostate is examined via the rectum. However, this so-called digital-rectal examination (DRE) is only able to identify larger tumours located on the surface.

PSA test indicates changes

It is therefore advisable to check what is known as the prostate-specific antigen (PSA). This protein is formed in the cells of the prostate and can be detected in the blood. An elevated PSA level may indicate the presence of a prostate carcinoma. A second measurement should be performed for levels above 4 ng/ml. If the findings are confirmed, a tissue analysis (biopsy) will usually be performed.

But an elevated PSA level does not automatically mean prostate cancer. A benign enlargement of the prostate or an infection of the urethra or prostate may also be the reason. The doctor can determine the free PSA (fPSA) in order to find out whether the prostate disease is 'benign' or 'malignant'. This free PSA is not bonded with other proteins and is more prevalent in cases of benign conditions. Therefore, the ratio between free PSA and total PSA provides important indications: the lower the fraction of free PSA relative to the total PSA, the greater the likelihood that prostate cancer is present.

PCA3 test as a meaningful addition

Besides PSA screening, the PCA3 test can also help to distinguish between prostate cancer and a benign prostate disease. PCA3 – short for prostate cancer gene 3 – is a tumour marker that can be detected in the urine by molecular genetic methods. Studies have shown that prostate cancer cells produce 60 to 100 times more PCA3 than benign prostate cells. Elevated PCA3 levels therefore indicate the presence of cancer cells. A low PCA3 level suggests the opposite.

Elevated PCA3 levels indicate the presence of cancer cells.

Imaging diagnostics and biopsy

Rectal ultrasound is a more precise method of localising and measuring tumours that are larger than 10 mm. Magnetic resonance imaging (MRI) is also helpful in the diagnosis of prostate cancer. However, imaging methods are not recommended as the first examinations for the early detection of prostate cancer. Cancer cells are ultimately verified by taking samples of prostate tissue. They are extracted directly from the prostate by means of biopsy and then analysed in a laboratory setting.

Treatment options

The chances of recovery are very good, provided the disease is detected before symptoms occur and the cancer has metastasised. This is a good reason to attend screening on a regular basis. A variety of treatment methods exist, depending on the stage of the disease and the accompanying risks: surgery with partial or complete removal of the prostate (prostatectomy), radiotherapy, hormone therapy and in some cases chemotherapy.

Recommended laboratory screening

- **PSA level**

This test is an optional health service for men younger than 45 and for men younger than 40 in cases of family predisposition.

- **fPSA/PSA**

Determining the ratio of free PSA (fPSA) to total PSA; optional health service

- **PCA3 level**

Distinction between prostate cancer and benign prostate conditions; optional health service





Individual health services

It is possible that the requested services and laboratory analyses will not be included in statutory health insurance. This means that your provider will not be required to cover any or perhaps all of the costs. In these cases you can have the tests done as optional services. You will receive an invoice, which you will be required to settle. We will then send the laboratory findings to your doctor.

Ask your doctor to explain the costs for the requested analyses and enquire with your health insurance provider which costs it will cover!

For further patient information on many other health issues, go to:

www.LADR.de/patienteninformation



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LADR Laborverbund Dr. Kramer & Kollegen unter www.LADR.de**

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