

Innovative Radiotherapy for Prostate Cancer

Prostate cancer has become one of the most commonly diagnosed forms of cancer among men. In Germany, around 58,000 new cases are registered annually. The question of how exactly prostate cancer emerges has not been answered definitively yet.

For patients, radiotherapy offers an alternative to the complete surgical removal of the prostate gland. Radio-therapeutic treatment can be an option when the attending physician or the patient has concerns about the operation and the risks or side-effects it could entail. This may be the case where the patient is in a weaker general state of health or when the tumour has surpassed the prostate capsule. Radiotherapy can also be considered as an alternative to surgical operation for older men.

Challenges of Radiotherapy

The success of radiotherapy on prostate carcinomas depends critically on the dose of radiation that hits the tumour. On the one hand, it should be high enough to kill the cancer cells. On the other hand, the exposure to the surrounding tissue needs to be low enough so as to protect the healthy tissue and to minimize the incidence of side-effects. This means that: the closer the tumour is targeted by the radiation, the higher the level of radiation that can be applied.

The particular challenge for radiotherapy is posed by the fact that the prostate is a relatively small organ and is located directly next to other vital organs. It is located below the urinary bladder, surrounds the urethra, and from behind lies adjacent to the rectum. Consequently, the radiotherapy must be planned with careful attention to targeting the prostate optimally, while preventing as much exposure as possible to the bladder and intestines. Moreover, in treating prostate tumours with radiotherapy, the movements of the prostate must be taken into account: Depending on the variations in the contents in the bladder or intestines, the position of the tumour can change slightly with each irradiation.

State-of-the-Art Treatment

The MediClin Robert Janker Klinik offers as a centre for high-precision radiotherapy innovative treatment options for prostate tumours. The specialized Klinik in Bonn has further enhanced its stereotactic radiotherapy with the Novalis® and Varian Silhouette radiotherapy systems. The irradiation is applied with high accuracy to hit the site of the disease, while preserving extensively the surrounding tissue and adjacent organs. These systems allow for the highest precision in radiotherapy on movable targets such as prostate tumours.

Advantages of High-Precision Radiotherapy:

- With special positioning technology, the necessary area of treatment can be reduced and exposure to surrounding, healthy tissue minimized.
- Even the smallest and most intricate tumours can be treated.
- Because it is non-invasive and takes a shorter amount of time, stereotactic radiotherapy is patient friendlier in comparison to irradiation with other systems. Through the low-impact procedure, the patient's quality of life can be enhanced.
- The radiotherapy is painless.

Quality through Interdisciplinary Cooperation

In addition to the state-of-the-art medical technology as well as over 70 years of experience, the MediClin Robert Janker Klinik is distinguished through its interdisciplinary exchange between radiotherapists and the oncologists in the area. By bringing together out- and inpatient therapy, our competence in the individual treatment of prostate cancer has been enhanced even further.

The network of care at our specialized Klinik for high-precision radiotherapy offers patients diagnosed with prostate cancer considerable advantages in the course of the entire treatment. Accordingly, prompt, efficient coordination is made possible among the specialists. From the radiological diagnostic to the therapy stage, the treatment plan is thoroughly coordinated with regard to duration, substance and location. For our patients, this close cooperation means shorter distances and less waiting time, while avoiding redundant and unnecessary examinations.