Precise Diagnosis of the Prostate Gland

Gentle and Safe: MRI-guided Stereotactic Prostate Biopsy with BiopSee® and Hitachi ARIETTA V70

Dr Wolfgang Leicht ardently takes time for his patients. This is a matter of course for the specialist in urology, which one would not really expect in everyday clinical life. But for Dr Leicht and his team, the patient always comes first. You can clearly feel this sincerity in the quiet and welcoming atmosphere at the Urological Clinic in Regensburg.

Innovation, modern medicine with the human touch

As head physician of the Urological Clinic at the Barmherzige Brüder Hospital and head of the Urology Medical Care Centre in Regensburg, Dr Leicht embodies the philosophy of the clinic: innovative medicine from a single source. After many years of experience in urological clinics in Karlsruhe and the university hospital in Mainz, Dr Leicht founded the clinic in Regensburg in 2014. The expertise of the highly qualified team covers the entire urological spectrum – from comprehensive diagnostics and conservative, surgical therapy through to holistic care.

Diagnosis of prostate cancer: gentle and precise thanks to BiopSee®

According to the “Interdisciplinary Quality Guideline S3 for the Early Detection, Diagnosis and Therapy of the Different Stages of Prostate Carcinoma” of the German Society for Urology, a biopsy of the prostate should be performed if prostate cancer is suspected. The Medical Care Centre of the Regensburg Urological Clinic uses a combination of two innovative technologies: precise MRI-guided stereotactic prostate biopsy using the BiopSee® system and proven urological ultrasound imaging solutions from Hitachi Medical Systems in Europe, through which Dr Leicht obtained this proven combination. “The great advantage of combining the two systems is that we achieve excellent imaging with the Hitachi ultrasound system, which is crucial for the diagnosis of prostate cancer. In combination with BiopSee®, we can take tissue samples from the entire prostate in a very precise and gentle way, namely a transperineal biopsy through the perineum. The patient is only asleep briefly and can return home shortly afterwards,” explains Dr Leicht. The transperineal application has the advantage that the highly infectious...
area of the rectum and the risk of bleeding can be avoided. This means a huge relief for the patient, not least because they only receive a simple antibiotic prophylaxis, thereby avoiding the systemic side effects of antibiotic therapy. In addition to the transperineal application, a transrectal application is also possible with BiopSee®.

**Accurate and traceable: targeted biopsies for targeted therapy**

Initially, a multi-parametric MRI image of the prostate is taken by the in-house radiology team. The radiologist identifies and classifies suspicious findings according to international classifications (PI-RADS). The image data set is then transferred directly to the BiopSee® system and integrated into the image processing of Hitachi’s high-resolution ultrasound device during the biopsy. BiopSee® records and stores the location of each tissue sample that was taken. This enables Dr Leicht to reliably assign a histology to each biopsy and reproduce it in the imaging. The documented tissue samples are not only regarded as a certainty about the diagnosis, but they also serve as a foundation for the further treatment and therapy plan, which is then individually tailored to the needs of each patient.

**Diseases of the prostate: comprehensive advice and holistic care**

Due to the sensitive significance of this area for many of his patients, Dr Leicht relies on comprehensive advice on all aspects of diagnostics and therapy – especially in the context of information about prostate carcinoma. According to Dr Leicht, the reason why this often remains undiscovered in many men for a long time lies in the “nature of man”: “The percentage of men over the age of 45 who voluntarily and at annual intervals go to the urologist for screening is shockingly low.”

**Building trust – easing fears**

Dr Leicht takes the time to explain the biopsy procedure to his patients and their partners and relatives and to alleviate the associated concerns. He uses the innovative technology in his consultations: “Lots of men have an abstract idea of the biopsy process. We show them the findings on the MRI and ultrasound images as well as the BiopSee® system itself. This makes the procedure much easier to understand, and we can ease many of our patient’s fears.”

In Europe, the stereotactic BiopSee® system from Medcom GmbH is marketed in defined geographical areas by Hitachi Medical Systems Europe Holding AG, Steinhausen, Switzerland and its subsidiaries. It can be combined with various Hitachi ultrasound systems, including the ARETTA and HI VISION systems. The BiopSee® system can be used to perform either transrectal (TRUS) or transperineal (TP) fusion biopsies.

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