Greenlight laser for gentle prostate therapy – a gold standard in urology?

The treatment of benign prostate hyperplasia (BPH) is currently undergoing a radical change. Laser methods are outstripping the classic resection procedure. The science journalist Martin Boeckh spoke with the pioneer of this new therapeutic procedure, the urologist Dr. med. Joachim-Ernst Deuster, founder of the Heidelberg Klinik für Prostata-Therapie.

When it comes to the minimal-invasive therapy of benign prostatic hyperplasia, in short BPH, urologists interested in state-of-the-art, gentle therapeutic methods sooner or later hit upon the greenlight laser principle. What makes the greenlight laser so attractive?

Dr. Deuster: The greenlight laser represents a wholly new dimension of minimal-invasive and low-risk treatment, one that has been unthinkable before now. This method is far gentler for the patient than any other method and enables him to leave the clinic after only one or two days.

 Doesn’t this minimal-invasive surgery mean the end for conventional resection by the TURP method?

Dr. Deuster: That’s indeed the case. Here at the Heidelberg Klinik für Prostata-Therapie we’ve been using the greenlight laser with success ever since 2003, although we did reach our limits in the case of an extremely enlarged prostate.

You’re speaking in the past tense. Has this changed?

Dr. Deuster: That really is absolutely a thing of the past now. Since the start of this year we now have a kind of power laser, a greenlight laser with a hitherto unprecedented output of 120 watts.

And now there are no limits any more?

Dr. Deuster: We surgeons have to be very careful about making promises. But one thing I can say is that with the high performance output of the 120-watt power laser we can treat prostates of almost any size.

How does the new miracle weapon against BPH work?

Dr. Deuster: The physical principle is the same as that of its predecessor: green light with a wavelength of 532 nanometers is transmitted via a flexible optical conductor through the urethra to the inner side of the prostate. This light is explosively absorbed by oxyhaemoglobin, evaporating the tissue and resulting in an irritation-free, fibrin-coated surface. The extremely shallow depth of penetration of the radiation means that there is no swelling or inflammation of the tissue.

And why exactly does the 120-watt power laser constitute such a novel method?

Dr. Deuster: The improved degree to

Committed to the gentle treatment of the patients

The concept of our Clinic for Prostate Therapy: State-of-the-art medicinal technology coupled with a pleasant, personal atmosphere. Based on this concept, our clinic is the only one in Europe that is specialized exclusively in the treatment of prostate disorders — and this for over 13 years now. We established these minimal-invasive methods in Germany, and in all modesty can claim to have paved the way for making the gentle therapy of prostate disorders reputable in Germany.

And yet medicinal technology continues to develop apace, and patients wish to be dependably informed and kept up-to-date of the developments. In this context it gives me great pleasure to present to you, dear readers, the very first edition of our PROSTATE NEWS, reporting trends in the field of the therapy of prostate conditions. This to give you an overview of state-of-the-art medicinal techniques that help to restore a little of the quality of life that you feel you may have lost.

We would be delighted if you placed your confidence in us and the many years of medical experience we have at our disposal.

Yours sincerely

Dr. med.
Joachim-Ernst Deuster
which the light beam can be focussed and the enhanced power output produce a much better vaporization effect; in other words, more tissue is eradicated to a better degree, and this much more rapidly, too.

That sounds impressive, and the advantages are now certainly with you and the new laser. But surely you’re not the only centre that uses this method?

Dr. Deuster: That’s right. Then again, with over 1,350 patients we’ve treated so far we’ve got the greatest experience with this method in Germany, so to a certain degree we regard ourselves as the pioneers of a state-of-the-art therapeutic procedure holding great promise for the future. What’s more, apart from us there’s hardly anyone in Germany who has the power laser too.

But some do have the old greenlight laser?

Dr. Deuster: But of course. Several university clinics and major hospitals meanwhile use the greenlight laser – and that’s a good thing, too. This technology is a blessing for the prostate patient.

All the same, you can’t complain about a lack of demand, can you?

Dr. Deuster: On the contrary. Patients not only from the immediate vicinity, but indeed from all over Germany and abroad highly appreciate the advantages of a small, specialized clinic.

...And these advantages are?

Dr. Deuster: We work in a very personal setting; The specialist himself holds the preliminary talks with the patient, gives advice, does the surgery, and follows the patient up personally – round the clock if necessary. That’s something a large university clinic can’t afford. And waiting times are avoided as far as possible.

Let’s return to the patient. It’s difficult to imagine that an intervention with a 120-watt laser doesn’t involve any pain!

Dr. Deuster: Here our anaesthetists offer peridural anaesthesia that is just as gentle as the operation itself. This means that the patient can slumber in a pain-free state or even – if he so wishes – remain awake throughout the operation and still not feel any pain.

Do the patients have any serious complaints after the surgery?

Dr. Deuster: Since the method entails the lesion of an internal surface, the patient may experience a raised urgency to urinate – apart from this, the patient can return to his everyday activities within the space of days.

Such a form of therapy surely has its price – from the financial viewpoint. Who picks up the costs?

Dr. Deuster: Most private health-insurance schemes reimburse the costs for the greenlight laser therapy. Patients in statutory health-insurance schemes must either have an additional benefits policy or else pay the costs out of their own pocket. But then again, there’s not one patient who’s yet regretted having opted for this gentle and low-risk treatment.

And where does it go from here? Will there soon be an even shorter-wave laser, maybe even in the UV range?

Dr. Deuster: The best is the enemy of the good, as the saying goes; but this will hardly apply to the greenlight laser, since even shorter wavelengths are unsuitable for use in this area. After all, green light is specifically adapted to the absorptive capacity of the blood vessels. Sure, there’ll be some minor improvements in the handling or regarding the sound-proofing of the instrument, but the quantum leap itself has already been made.

And so to the last question: Will the greenlight laser become the gold standard – or maybe it already has?

Dr. Deuster: I’m quite certain on that – secretly it already is the standard. It has long since superceded the conventional transurethral resection method at renowned clinics. And understandably, too, since who’d like to expose himself to unnecessary risks and