

SEEDS OF HOPE

A revolution in the treatment of prostate cancer promises to drastically improve patient outcomes while maintaining quality of life

Prostate brachytherapy is a cutting-edge treatment for the cure of prostate cancer. It aims to provide the best available cure rates and couple this with minimal impact on the patient. In fact, it is so minimally invasive that it has been termed 'pinhole surgery'. It is a 'one off' treatment that can be performed as a day case and patients can return to normal work or activities almost immediately after surgery.

Scientists, doctors and patients have long sought the 'magic bullet' to cure cancer. The ideal being to kill the cancer itself but spare the normal tissues and preserve the patient's health and quality of life as it was prior to their treatment. Huge strides have been made towards this laudable aim in many areas of cancer care and the latest area to benefit from the decades of dedicated research is prostate cancer.

You can't open a newspaper or magazine without seeing an article on prostate cancer diagnosis or treatment, with new techniques hitting the headlines regularly. In the background, a quiet revolution in prostate cancer treatment has been taking place. One that has now matured to the point that it offers a real hope of a quantum leap forward in both outcomes (cure rates) and maintenance of quality of life (minimal side effects) for patients with prostate cancer. With total cure rates ranging from





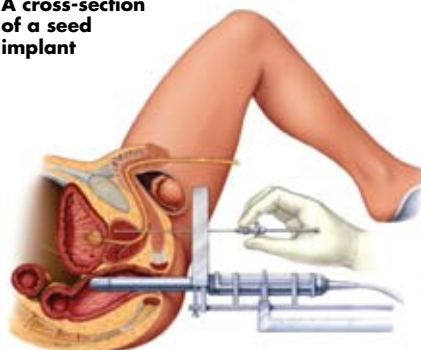
Treatment helps families through the process, too

87-95%, prostate brachytherapy certainly meets many of the criteria attributable to a 'magic bullet'.

HOW DOES THIS ACHIEVE REMARKABLE RESULTS?

Prostate brachytherapy comes in two forms, low dose rate (LDR or 'seed') and high dose rate (HDR). Both aim to target very precisely the prostate and to shape or 'conform' the radioactive field to each individual prostate and tumour extent, thus minimising the effects on adjacent 'normal' tissues. It is this precision and lack of spread of the radioactivity that allows the delivery of high doses of radioactivity giving

A cross-section of a seed implant



'WITH TOTAL CURE RATES RANGING FROM 87-95%, PROSTATE BRACHYTHERAPY MEETS CRITERIA ATTRIBUTED TO A MAGIC BULLET'

rise, ultimately, to the superb cure rates. Seed, or LDR, prostate brachytherapy is suitable for patients with low to intermediate risk prostate cancer, localised within the gland. It is usually administered as a single implant with no requirement for other forms of therapy, such as hormones or external beam radiotherapy, in most patients. This is termed 'monotherapy'. HDR brachytherapy, by contrast, is utilised for higher risk patients or those with extension of tumour just outside the prostate and is typically used in combination with hormones and a course of external beam radiotherapy. It is the precision of placement of the seeds and the 'contouring' that provides such favourable results

planning where the seeds go within the gland and subsequent implantation takes place contemporaneously at a single sitting. This means that there is only the requirement for a single anaesthetic, dosage parameters are available and adjustable throughout the implant and the whole procedure can then be performed as a day case.

The seeds are introduced into their designated position within the prostate through fine needles that enter through the skin below the scrotum,

Used prostate brachytherapy needles show the complexity of hope



MEET THE EXPERT

Mr Richard Lodge, ChM FRCS (Urol) is a consultant urological surgeon at Spire Wellesley Hospital in Southend



Mr Lodge has sub-speciality interests in prostate cancer and prostate brachytherapy, keyhole surgery for kidney and adrenal cancers and laser prostatic surgery (HoLEP). He is the co-founder and lead clinician for the Essex regional prostate brachytherapy service at Southend Hospital, which has become a major UK centre for provision of prostate brachytherapy for both high and low risk prostate cancer patients, providing both LDR and HDR brachytherapy.

meaning that no incisions are required. It is this that has led to the term 'pinhole' surgery being applied to the process. As treatment is completed in one sitting, there is minimal impact on the patient's time and commitments.

New variations of the equipment used and refinements in the technique employed are all designed to enhance the already precise nature of the implantation process. The aim is to ensure the delivery of high quality implants and the benefits that this provides in terms of better cure rates and diminished side effects.

BXTAccelyon is a leading supporter of these new techniques, currently leading the way in both technology and equipment innovation – and evolution of the technique itself.

AN INNOVATIVE CHOICE

Prostate brachytherapy is a highly developed and individualised option for the treatment of localised prostate cancer. It's precise nature provides many benefits, from high cure rates to low side effects. As a 'one off' implant the treatment time is minimal, enabling patients to plan the timing of their procedure and fit it into their busy lives with little disruption.

The favourable side effect profile maintains quality of life and leaves the patients and their families free to concentrate on making the most of their lives. It allows them to be secure in the knowledge that they are part of a new era of care that places the patients and their needs at the centre of all decisions and treatment options.

FOR MORE INFORMATION

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THE STAGES OF A SEED IMPLANTATION

There are several robust and accredited techniques for seed implantation. Some involve a two-stage technique with a planning study performed initially, followed by the implantation some two weeks later. More and more, however, there is a move to a 'one-stage' implant, where the mapping of the prostate,