

## What Is Brachytherapy?

---

Each year, over 1.4 million people are diagnosed with prostate cancer worldwide, making it the fourth most prevalent type of cancer on the planet. In the UAE, this malignant form of the disease has been traditionally treated via a radical surgery process or through weeks of intensive radiotherapy, both of which are expensive, inconvenient and painful for the patient.

However, a highly effective new treatment – called brachytherapy – is revolutionising the way that prostate cancer is dealt with today. Already widely used in the western world, brachytherapy was trialled for the first time in the UAE earlier this year and is now being offered to all eligible patients by the Comprehensive Cancer Centre at Mediclinic City Hospital in Dubai.

### Standard of care in the west

The survival rate for prostate cancer is generally encouraging – 97% after five years and 98% after 10 years in the USA – and those impressive figures are thanks, in large part, to the advent of brachytherapy. Already the prevalent standard of care in the west, brachytherapy dispenses with weeks of radiotherapy without needing debilitating surgery, either.

Instead, the process takes advantage of high-precision radiotherapy to guide needles directly into the prostate using ultrasound technology. By using the method, the entire operation can be completed within a matter of hours and the patient can go home the same day, with no need to take time off work to recuperate. What's more, it's the most cost-effective option available, as well as the one which involves the least likelihood of complications.

### A landmark day for the UAE

In March, an Abu Dhabi-based engineer became the first patient to undergo the procedure in the UAE. It was handled by a team of local experts led by Dr Rana Irfan Mahmood, an experienced radiation oncologist who has worked in the UK for many years and who specialises in prostate cancer. The Mediclinic took advantage of its state-of-the-art equipment, including a BK 5000 Ultrasound Machine and Varian GammaMed HDR brachytherapy machine to execute the treatment successfully.

“I must confess that I was nervous to be the first but the team at Mediclinic led by Dr Mahmood was very professional and put me at ease,” [confessed the patient](#) after the treatment was completed. “Now I’m happy that I went through this simple treatment without surgery. Thank you Mediclinic for offering this prostate brachytherapy treatment, as the first and only provider in the UAE.”

## Leading by example

As well as offering this effective and efficient treatment to all Emirati men, the Comprehensive Cancer Centre was also the first to deploy interstitial brachytherapy to combat large cervical cancer in 2021. What's more, the Centre is keen to advance the capabilities of other medical institutions in the Gulf region, thus allowing more and more members of the Arab world to benefit from this revolutionary treatment.

The Centre is a founding member of the Middle Eastern Society of Radiation Oncology (MESTRO) and its team recently helped the Sultan Qaboos Centre in Muscat to become the first Omani hospital to offer interstitial brachytherapy. More plans are in the pipeline to progress the availability of brachytherapy in the UAE and beyond going forwards, with MESTRO and the Comprehensive Cancer Centre at their heart.