

MICHIGAN INSTITUTE OF UROLOGY PIONEERS MEN'S HEALTH TECHNOLOGIES

November has become known for more than just Thanksgiving. Most of the country also celebrates No Shave November, where individuals participating forgo shaving and grooming their hair for thirty days. In addition, participants donate all resources they would be spending on hair care to a foundation dedicated to spreading awareness of various men's health initiatives. Michigan Institute of Urology is pioneering men's health technologies all year long.

Current Generation Technology Is An Effective Option For Localized Prostate Cancer

According to the American Cancer Society®, prostate cancer is the second most common cancer striking men after skin cancer.¹ Thanks to advances in diagnosis and treatment, prostate cancer has one of the highest survival rates of any type of cancer.¹

While the majority of prostate cancers are treated with radiation and surgery, the minimally invasive, localized procedure known as cryotherapy is gaining more interest, particularly, for cancers in older men and for recurring prostate cancer and is available at Michigan Institute of Urology (MIU).

Localized Cancer Treatment

Cryotherapy uses freezing technology to kill cancerous tissue. Different from radiation, which can require up to 45 treatments, cryotherapy is usually a one-time treatment. As an outpatient procedure, cryotherapy patients typically have minimal pain and are able to return to normal activities shortly after their procedure.

When Cancer Comes Back

According to a [study](#) in the *Reviews in Urology*, approximately one third of the 233,000 men who are diagnosed with prostate cancer each year will undergo radiation.³ Unfortunately, the cancer will return in 20% to 66% of these men.³

Salvage therapy, also known as rescue therapy, is a form of treatment administered when other therapies have not been successful. A growing amount of evidence supports the use of cryotherapy for patients with localized prostate cancer following radiation therapy, according to an [editorial](#) in *European Urology*.⁴

"It's a sad truth that one out of four men will have recurrent prostate cancer after radiation therapy. Many of those patients are told there are no other options," explained Dr. Kenneth Kernan a Urologist with Michigan Institute of Urology "Cryotherapy is a viable, minimally-invasive treatment where many patients go home the same day."

Current Generation Technology Has Fewer Side Effects

Early cryotherapy treatments in the 1960s used liquid nitrogen to create an ice ball to freeze tissue. Use of nitrogen, however, lacked precise control and monitoring, resulting in high complication rates.

The treatment has since been revolutionized and has transitioned to argon-based systems, which use ultrathin needles to create precisely controlled ice balls. Ultrasound imaging has also evolved with cryotherapy and provides visualization of the generated ice ball. Cryoablation now incorporates routine use of advanced sensing probes, double freeze-thaw cycles, and urethral warming catheters. When used together, these technical advances, along with improvements in technique, have led to reductions in side effects.

“Unfortunately, many of the treatments we use to kill prostate cancer come with potential side effects such as incontinence,” said Dr. Kernen. “Fortunately, with the improvements in cryotherapy we’ve seen in the last decade, the occurrence of incontinence has been dramatically reduced and is often only a temporary side effect.”

Cryotherapy is also used to treat cancers of the kidneys and lungs, as well as treating liver metastases and providing palliative intervention for cancer.

Michigan Institute Of Urology (MIU) Offers Exclusive BPH Treatment In Michigan Which Shrinks Prostate Tissue In Benign Prostatic Hyperplasia (BPH) Patients.

MIU has become the first physician group in Michigan to offer a new technology to treat BPH in patients. The 10-minute treatment uses radio frequency energy to create sterile water vapor (steam) to convectively deliver precise thermal energy treatments.

Since 2008, NxThera has been researching alternative treatment options that can be applied simpler, while also reducing the time and discomfort for BPH patients. Convective Water Vapor Energy (WAVE™) is a unique, natural and powerful thermal therapy technology with the potential to treat a variety of endourology conditions. Annually, over 400,000 men attempt and discontinue medical therapy for BPH. With the use of sterile water steam, Rezum disperses rapidly between cells more efficiently, and immediately causes cell membranes to collapse.

“Rezum is a very safe and quick procedure that can be completed in office without any significant side effects or risk”, says Dr. Jason Hafron with MIU, “Since we’re the first practice in Michigan to be providing the procedure and have seen successful results the past six months, we recognize Rezum as the most novel treatment to help restore prostate tissue.”

BPH can be significantly life changing with disruptive symptoms such as frequent urges to urinate, as well as pain caused from difficulty urinating. These symptoms have been known to create considerable psychological distress in patients. Although additional treatment options vary, Rezum has proven to provide a more pleasant experience for patients seeking treatment.

With each vapor application lasting only nine seconds, the steam becomes contained within a limited area of the prostate allowing the treated tissue to be absorbed by the body’s natural healing response. Post procedure, some patients see up to a 55% reduction in prostate volume within the first six months.

Highlights of the therapy include:

- Performed in-office and patients can return home immediately;
- Does not require general anesthesia;
- Relieves symptoms safely and effectively;

- Is an alternative to BPH medications;
- Provides noticeable symptom improvement within two weeks;
- Preserves erectile and urinary functions;
- Allows patients to return to regular activities within a few days; and
- Is considered medically necessary by Medicare and is covered by most private insurance.