Prostate Cryotherapy

Cryosurgical Ablation of Prostate, (CSAP) or Targeted Cryoablation of Prostate (TCAP)

What is prostate cryotherapy?

Prostate cryotherapy is the process where localized prostate cancer treatment is accomplished through the use of extremely cold temperatures within the body. Under anesthesia, cryo probes are inserted into the prostate gland at regular intervals with ultrasound guidance. The prostate is then frozen to temperatures below -40oC which kills the prostate cancer cells that are frozen. These cells disintegrate and are reabsorbed by the body and scar tissue forms in its place.

Why Cryotherapy?

Cryotherapy offers a minimally invasive solution to patients with prostate cancer, which allows them to avoid open surgical procedures or radiation. Cryotherapy also offers unique benefits to patients that other technologies or approaches cannot.

Who should get cryotherapy?

Cryotherapy has earned respect as one of the best treatments for patients who have failed primary therapy with radiation or seed implants. This is most often detected when a patient has a persistently rising PSA after radiation has been given and the urologist has a concern that a patient's prostate cancer has recurred. In this context, the procedure to freeze the prostate is called "salvage cryotherapy" or "salvage CSAP" or "salvage TCAP". This refers to the fact that the cryotherapy is attempting to salvage a patient from a situation of radiation failure. Salvage CSAP offers the advantage of avoiding open surgical removal of a prostate (salvage prostatectomy) that has failed radiation. Salvage CSAP has a 5 - 8 fold lower incidence of urinary incontinence compared to salvage prostatectomy and is in comparison a much easier procedure to perform with lower side effects.

Many patients are looking at CSAP as primary therapy for their prostate cancer, that is, freezing the prostate instead of having it removed or treated with radiation. Primary CSAP is usually most attractive to patients who are over 65 years old, have other medical conditions that would preclude major surgery or patients who have a large volume of prostate cancer seen on biopsy. Primary treatment with prostate cryotherapy is also attractive to patients with difficulty voiding (e.g. slow stream, dribbling, hesitancy, intermittent urinary flow, urinary retention, urinary frequency, night time frequency or urge leakage) because often times these symptoms will improve after cryotherapy. Prostate cryoablation saves a patient repeated visits to the doctor associated with external beam radiation therapy or proton therapy and has a very low incidence of side effects.

Side effects of prostate cryotherapy?

Prostate cryotherapy can produce excellent outcomes with a low incidence of side effects. Side effects most commonly experienced by patients include blood in the urine (25%), urinary retention (10%), urinary incontinence (2-5%) and pain and swelling (5-10%). The incidence of fistula formation has dropped dramatically with modern methods and is now generally viewed to be less than 1%. Prostate slough is when the lining cells of the prostate fall off and expose the ice-killed prostate tissue to the urine space (10%). When this occurs, patients will sometimes require an additional procedure to remove prostate tissue, since this will allow healing to occur much more quickly.

Prostate cryotherapy is performed on a regular basis by the physicians at Cheyenne Urological and we offer the latest equipment and techniques for patients. We utilize the new IceRodTM technology from Oncura as well as technical innovations in the delivery of cryoablation to our patients. We strive to remain on the cutting edge of the field of cryoablation science and actively follow our outcomes to assure consistent success in this procedure.