

# Magnetic resonance therapy for the prostate (TULSA)

In the TULSA procedure, pathological changes of the prostate are removed with very high temperatures under magnetic resonance imaging (MRI) guidance. The procedure is done through the urethra and surgical procedures are not needed. The pathological changes may be benign or malignant tumors. The procedure induces thermal damage to the prostate gland tissue. This will cause transient swelling of the prostate and lead to narrowing of the passage of the urethra through the prostate gland. Before the procedure, you will discuss the need for a catheter after the TULSA procedure to secure proper flow of urine and bladder emptying. The catheter may be introduced into the bladder either through the urethra or through the abdominal wall (cystostomy).

Bowel evacuation is important for a successful outcome of the procedure. Please purchase from a pharmacy two Picoprep® sachets and one Toilax® mini-enema. You do not need a prescription for these medicines. Moving and exercise promotes bowel emptying. Usually, the effect of the laxatives begins in 2–4 hours after administration. Picoprep® is used for bowel emptying and it may cause nausea, vomiting and abdominal pain. If this happens, drink the medicine slower.

## On the day before the procedure

- Drink only clear fluids. Examples of clear fluids are: fruit soup or juices (without pulp and seeds), meat or vegetable broth, tea, coffee, soft drink or water. Don't drink only water. You may drink dietary supplement drinks. Don't drink milk and don't drink coffee or tea with milk.
- Take two doses of Picoprep® in the morning (at around 8 o'clock AM). Empty the contents of the sachet into a glass with about 150 ml of water and mix for 2–3 minutes. Drink the solution when it has become white and cloudy. The liquid may become warm, as the Picoprep® dissolves into the water. If this happens, wait until the liquid cools and the temperature is suitable for drinking.
- Take a break of about 30 minutes after you have drunk the two doses of Picoprep®
- Then drink at least five glasses (each with a volume of 250 ml) of the clear liquids mentioned above. You should drink at least 3 liters during the day. Divide the entire volume of the day into several drinks and take them over several hours.
- In the evening, administer the Toilax® mini-enema.

# On the day of the procedure

- Don't eat anything after midnight (24:00 hours) before the procedure. Don't drink fluid food nor cloudy liquids, like yogurt, milk, soup, smoothies or juices containing fruit pulp. And please don't take lozenges or any candy.
- If needed, you may during the night drink a reasonable volume (1–2 dl at a time) of water, clear juices without fruit pulp (e.g., apple juice), tea or coffee without milk. Don't drink anything for two hours before the procedure.
- Beverages containing alcohol are not allowed for 24 hours before arrival at the hospital.
- Do not use chewing gum or any form of tobacco products for two hours before the procedure.
- Remove all jewelry and leave them at home.
- Procedure
- The procedure is done under general anesthesia. The procedure will take 2–4 hours in total.
- An applicator will be introduced into your urethra. Through this applicator ultrasound will be directed at your prostate. A cooling probe will be inserted into your rectum to prevent thermal (heat) damage to the rectal wall.
- A urinary catheter will be put in place while you are under general anesthesia and it is usually kept for 2–4 weeks.

## After the procedure

- You may experience mild pain in the lower part of your abdomen and/or urethra during the first weeks after the procedure. If needed, take a mild analgesic (ibuprofen, paracetamol (acetaminophen)).
- You may experience bladder irritation, such as a need to urinate or frequent micturition. Medicines that soothe the bladder can alleviate these symptoms.
- During the time you have the catheter, the urine may appear blood-stained and it may contain tissue particles. With sufficient consumption of liquids (1,5 2 liters) the urine will become diluted and the TULSA-treated area will be well flushed.
- Sauna bathing is not allowed during the time you have the catheter.
- Your hospital stay will take about 24 hours. You may take leave of absence from work for the time you need the urinary catheter.
- Easy exercise, like walking or Nordic walking, is beneficial and recommended already 24 hours after the procedure.
- But please avoid strenuous exertion for 4 weeks after the procedure.
- The outcome of the treatment will be evaluated later by MR imaging. You will get a separate invitation for MR imaging.

#### Please contact the unit where you have been treated

• If you experience problems, for example, with the urinary catheter.