

## **Micro-TESE, microsurgical testicular operation**

Micro-TESE, or microsurgical testicular operation (microdissection TESE, MD-TESE) is a procedure performed as a part for fertility examinations and treatment if no sperm has been found in the ejaculate. The most common reason for the operation is a suspected dysfunction in semen production.

Use of microscope technique ensures the testicular tissue is handled with care, and it is possible to minimize the risk of problems to blood circulation in the tissue; serious complications and testicular damage are rare. The goal of the procedure is to locate areas in the testicle where semen production is taking place. The collected sperm are frozen, to be used later in IVF treatment. The IVF fertilization of the egg cell is always performed using the microinjection method (ICSI).

A small tissue sample is also collected during the operation, and it will be sent to a pathologist for analysis to determine the overall structure of the testicle.

### **Preparing for the procedure**

Due to the regulatory provisions regarding fertility treatments, HIV and hepatitis antibody tests are required before sperm is frozen. The blood test must be taken **3 months at the earliest and 1 month at the latest before the surgery**. If the tests have **not been taken**, the procedure has to be cancelled.

The samples can be taken in any **Tykslab laboratory unit or in the local health center of your home municipality**. You can schedule a time online beforehand at <https://tyks.vihta.com> or by calling 02 313 6321 (Mon–Fri, 7.00 am–2.30 pm).

If you have your samples taken **in a laboratory unit that is not a Tykslab unit, take the separate laboratory referral (attached) with you**.

### **Arriving at the hospital**

Arrive at the hospital on **the morning of the operation**. You **must not eat for 6 hours or drink anything for 2 hours before arriving at the hospital**. During the night, before the 2 hour fasting period starts, you can drink 2–4 deciliters of clear, noncarbonated drinks such as water, clear tea, coffee without milk, and clear juice with no pulp. We recommend that you use a nutritional supplement called ProvideXtra® (200 milliliters) in place of other drinks. The supplement is available from pharmacies.

Take a pair of **underwear that support** the scrotal area with you to the hospital. If you would rather arrive at the hospital on the evening before the procedure, contact the surgical coordinator.

## **The procedure**

The procedure is carried out under local anesthesia. The scrotum is opened, the testicular tissue is examined under a microscope, and several microscopically small tissue samples are taken. These are taken to a laboratory and examined for sperm during the surgery. If required, the procedure can be administered to both testicles. The operation usually last for about two hours.

## **After the procedure**

In the beginning, you will be monitored at the surgery unit's recovery room after the operation, after which you will be transferred back to the inpatient ward. If you are feeling well, you can be discharged from the hospital on the evening of the procedure. However, for your own safety, this requires that **you have someone who can escort you home and be with you until the morning after the procedure**. Driving and drinking alcohol is strictly prohibited for the first 24 hours after anesthesia. Your body metabolizes anesthetics slowly, and the medications can have dangerous interactions with alcohol.

Before you are discharged from the hospital, the doctor who performed your procedure will come to meet with you to go over the findings and possible other information, such as fertility follow-up treatment options.

Depending on your job, you will be prescribed about 4 days of **sick leave** and you will be given a prescription for pain medication.

## **Treatment at home**

The operation incision in the scrotum is a few centimeters long, and the sutures are absorbable. The scrotum has been "packed" with dressings after the procedure; their function is to support the incision area.

After the procedure, you must use underwear that supports the scrotum. To prevent hematomas, it is important to avoid strenuous activities and sports. You can go to the sauna and shower normally the day after the surgery. It is quite common to develop a bruise after the surgery. If the hematoma is large, or if the swelling and/or pain is severe, contact the unit responsible for your care.

## **Contact information:**

If you have questions regarding semen analysis or possible fertility treatments, you should first contact the unit that has referred you to Tyks for surgical treatment.

In questions regarding the operation, please contact the Tyks Majakka hospital, Gynaecological Outpatient Clinic.

- Surgical coordinator, Monday to Friday 9.00 to 10.30 am, telephone 02 313 1323
- Nurse, Monday to Friday from 8.00 am to 3.00 pm, telephone. 02 313 1322
- In urgent matters in the evenings and weekends, telephone 02 313 1322