About Your Procedure

Sperm retrieval (microTESE)

This handout explains microsurgical testicular sperm extraction (microTESE). It includes instructions to follow before and after your procedure.

What is a microTESE procedure?

MicroTESE stands for microsurgical testicular sperm extraction. This surgery is done to find healthy sperm inside the testes. The sperm are then retrieved for use in fertilization procedures.

Surgery and hospital lab staff will work together so that tissue samples can be checked while the surgery is underway.

What results can we expect?

Sperm is found about 70% of the time (70 times out of 100 procedures) using the microTESE procedure.

How is it done?

You will be given a general anesthetic medicine that will make you sleep. Your surgeon will then make an incision in your scrotum and into the testicle. A high-powered surgical microscope is used to find the tiny seminiferous tubules (long, narrow tubes where sperm are produced).

Your surgeon will remove portions of these tubules and hand them to the Male Fertility Lab technician, who will be standing by in the operating room. The technician will search for sperm right away and report findings to the surgeon during the surgery. The surgery may last 3 to 4 hours.

Talk with your provider if you have any questions about sperm retrieval procedures.
Who should have microTESE?

MicroTESE is best for men who:

• Have *azoospermia* (lack of sperm in the semen) that is not caused by any blockages
• Have had *FNA mapping* that showed very few sperm in their testes (*hypospermatogenesis*)
• Are OK with having major surgery
• Want the most complete sperm retrieval procedure

What happens after retrieval?

After sperm are retrieved, they may be:

• Used in the lab for *intracytoplasmic sperm injection* (ICSI). In this procedure, a single sperm is injected into each egg. The embryos that result after 3 to 5 days are placed in the woman’s uterus. Extra embryos can be frozen for later use.
• *Cryopreserved* (frozen) for using later in achieving pregnancy through *assisted reproductive technology* (ART).

How to Prepare

7 Days Before

• Starting 7 days before your procedure, do **not** take any aspirin or aspirin-like drugs such as ibuprofen (Motrin, Advil, or others) or naproxen (Aleve, Naprosyn, or others). These drugs may cause extra bleeding during and after your procedure.
• Arrange for a responsible adult to drive you home after your surgery. You will go home on the same day as your surgery, but you may not drive yourself or take a bus or taxi.

The Day Before

• **Eating:** After midnight, do **not** eat or drink anything.
• **Shower:** Take a shower the night before your surgery. Use the antibacterial soap your nurse gave you to wash your body. If needed, you can also buy this soap (Chlorhexidine 4%) at your local pharmacy.
  - Do **not** use the antibacterial soap on your face and hair. (See directions that came with the soap.) Use your own soap and shampoo on your face and hair.
  - Use clean towels to dry off, and put on clean clothing.
  - Do **not** use cologne, lotion, or deodorant after showing.
Day of the Procedure

- Do **not** eat or drink anything.
- You may take your usual medicines with **only** a small sip of water.
- Take a 2nd shower using the antibacterial soap. Follow the same instructions as you did for your shower the night before.
- Wear comfortable, loose clothing.
- You may bring your own jock strap (athletic support), or we will provide one for you if you do not bring one. You may also wear a pair of tight briefs.
- Bring your driver with you to the hospital.

What to Expect After Your Procedure

On the Day of Your Procedure

- Do **not** have any sexual activity, including masturbation.
- Keep your incision clean and dry.

Physical Symptoms

The procedure should not affect your ability to walk or sit. But, you may have discomfort after the procedure. These common symptoms do **not** require a doctor’s attention:

- Bruising and color change of your scrotum and the base of your penis. This will take about a week to go away.
- A small amount of thin, clear, pinkish fluid draining from the incision. This will happen for a few days.
- Slight swelling of your scrotum.
- You may have a sore throat, nausea, constipation, and general body aches. These symptoms should go away within 48 hours.

Swelling

To reduce swelling, use a cold pack the night of surgery and the next day. A bag of frozen peas works well for this.

- Place a thin, clean towel on your scrotum (or scrotal support). Place the cold pack on top of the towel. Do **not** put the cold pack directly on your skin.
- Leave the cold pack on for 20 minutes, then off for 20 minutes. Keep doing this for the first 24 hours after your procedure. Keep your scrotum cool, **not** cold.
**Fluids and Food**

- Make sure to drink plenty of water so you stay hydrated.
- Resume a normal, well-balanced diet when you return home.
- If you are not feeling normal, start with food that is easy to digest, such as soup or broth. Avoid eating greasy or spicy foods.

**Pain Medicine**

- If your doctor prescribes Norco for pain:
  - Take it exactly as directed.
  - Do **not** drive while you are taking Norco or other prescription pain medicines.
  - **Do not take acetaminophen (Tylenol) while you are taking Norco.**

- Do **not** take aspirin, ibuprofen (Advil, Motrin, and others), or naproxen (Aleve, Naprosyn, and others) for at least 2 days after your procedure. These drugs can keep your blood from clotting normally, which can cause bleeding.

- After 2 to 3 days, you may not need the stronger pain medicines. At this time:
  - If you were given Norco and **are no longer taking it**, you can take Extra-Strength Tylenol, 1 to 2 pills every 6 hours as needed.
  - If you were given pain medicine other than Norco, ask your doctor or nurse if it is safe to take acetaminophen while you are taking your prescription pain medicine.

**1 Day After Your Procedure**

- **Do not** have any sexual activity or masturbate for 3 to 4 weeks.

- Swelling of your scrotum will increase for 24 to 48 hours. This swelling may take several days or weeks to go away.

- Keep using cold packs to reduce swelling (see “Swelling” on page 3). Stop using the ice packs after 24 hours.

- Remove all bandages from inside the jock strap 24 hours after your procedure. Keep using the support for 3 days total. After that, you may wear your usual underwear.

- You may shower after you remove the bandages. Use a clean towel to gently pat the area around your incision until it is fully dry.
After the 2nd Day

- You may resume normal, light activity after 48 hours or when you feel better. Do not do activities that cause discomfort.

- You may resume more vigorous activities such as jogging or weight lifting after 3 to 4 weeks. Listen to your body. If what you are doing causes discomfort, slow down or stop and rest.

- You may return to work when you feel comfortable enough to do so.

- Your incision will be closed with stitches. These stitches will dissolve and do not need to be removed. It may take 2 to 3 weeks for them to dissolve all the way.

Results

Your doctor will know the results of the sperm retrieval during the procedure. Your doctor will talk with you and your partner about these results in the recovery area.

When to Call the Clinic

Complications after this procedure are rare. But, call the Men’s Health Center during clinic hours or go to the Emergency Room after hours if you have:

- **Signs of a hematoma** (bleeding under the skin): Severe bruising (black and blue skin), especially if you also have throbbing pain or there is a bulge around your scrotum.

- **Signs of infection**: Fever higher than 101°F (38.3°C), shaking, or chills, especially if your scrotum is warm, swollen, red, and painful, and there is pus draining from your incision. You may need to take antibiotics.

- **Other signs**: Any other symptoms that you are concerned about.

Paying for Your Procedure

Health insurance plans may not cover all types of infertility treatments. Some plans may cover tests and procedures related to the diagnosis of male infertility, but many do not pay for surgical retrieval of sperm.

If you are thinking about having sperm retrieval, please contact your health insurance provider and find out what they will cover. You may need to pay for the sperm retrieval procedure before it is done.

There are added fees for freezing and storing frozen sperm (cryopreservation). You may receive a separate bill for these services.