

# Patient Education Guide to Testicular Sperm Extraction

## Introduction

You have chosen to proceed with a testicular sperm extraction (TESE). This sheet is to help you understand your procedure, what will happen in the hospital and what you can expect when you go home. Below you can find your plan of care from your doctor.

## About Testicular Sperm Retrieval

Testicular sperm extraction (TESE) is a procedure involving the excision of seminiferous tubules from the testicle to obtain sperm for reproduction. TESEs are performed for a number of reasons including obstructive azoospermia (absence of sperm), spermatogenic failure, or patients with cancer for cryopreservation. Men with azoospermia from obstruction such as a history of vasectomy or congenital absence of the vas deferens have a high success rate of sperm retrieval as the problem lies in the transport of sperm. Men with spermatogenic failure used to be considered untreatable; however, depending on cause of the failure, many of these men may reproduce with the assistance of in vitro fertilization (IVF) with intracytoplasmic sperm injection (ICSI). In men diagnosed with cancer, TESE with sperm cryopreservation offers the potential to maintain sperm for future use with assisted reproduction.

TESE may be done in the office using a local anesthetic or in the operating room under general anesthesia. A small incision is made on the front of the scrotum to reveal the testicle. The outer layer of the testicle is then opened and seminiferous tubules are excised.

Once the tissue is obtained from the testicle, the tissue, the sperm is extracted by a trained andrology specialist. The sperm may then be used for IVF with ICSI or cryopreserved for future use.

Because of the relatively limited number of sperm that are obtained through TESE, these sperm are combined with eggs from the male's partner using ICSI.

## About The Procedure

A local anesthetic is injected alongside the spermatic cord (scrotal cord-like structure that holds the testicular vessels, nerves, and vas deferens) to numb the nerves of the testicle. A small incision (~1 inch) is made through the skin over the anesthetized testicle. A smaller incision is made in the outer fibrous layer of the testicle, and small pieces of testicular tissue are expressed and removed from the incision. The outer layer of the testicle and skin are then closed with self-dissolving suture.

A portion of the tissue is then examined under a microscope by a trained andrology specialist. The remainder of the tissue is either incubated and used for IVF/ICSI or cryopreserved.

For additional information on sperm retrieval techniques such as TESE, see below:

<https://www.urologyhealth.org/urology-a-z/s/sperm-retrieval>

## **Before The Procedure**

**If you take medications that cause clotting of the blood such as Coumadin, Plavix, Aspirin, Vitamin E, fish oil, or any NSAID (i.e.: Motrin®, Aleve®, Advil®, ibuprofen), these medications should be reported to your doctor and the person giving you medications. For your safety, these types of medication should not be taken for a least a week before your procedure.**

## **Medications Following Your Procedure**

- You may be prescribed a pain medication for breakthrough pain and an antibiotic which you will take for 3-5 days following your procedure depending on your prescription.
- Take pain medication as in the instructions for severe pain but use acetaminophen for mild to moderate pain
- A non-narcotic approach is ideal and proven to provide excellent pain relief along with practical measures such as supportive underwear and intermittent icing).
- If you feel that your pain is poorly controlled despite practical measures and your prescribed medications, please call our office to discuss the next steps.
- If you are taking fertility medications such as HCG, FSH, Vitamin E, CoQ, L-carnitine, or vitamin C, you may continue these following your procedure.
- If you are on blood thinners, be sure to confirm it is okay to resume this medication prior to restarting.

## **Recovery Following Your Procedure**

- Please take your medications as prescribed, whether it be your as needed pain medication or your scheduled antibiotics. You are anticipated to have discomfort following your procedure; however, we want you to have a speedy recovery and not be limited by pain.
- Avoid lifting anything heavier than 10 pounds for the first 48-72 hours following your procedure. You may return to work as previously instructed.
- You may notice some swelling in the scrotum as well as black and blue bruising in the surgical areas. This is common and no reason to worry. If the swelling continues or you have new onset discomfort different from shortly after surgery, call the office to discuss with our staff.
- Wear supportive underwear for comfort. This takes tension off your testicles and can assist with scrotal discomfort.
- You may use ice packs on and off every 20 minutes as needed for the first few days to reduce swelling and discomfort.
- Abstain from all sexual activity including masturbation for 1 week.

## **When to contact your health care provider**

**Call your doctor if you have:**

- Trouble urinating or cannot urinate
- A fever of 102 degrees Fahrenheit or higher
- Pain that gets worse or does not improve with medication
- Uncontrolled nausea and vomiting
- Pain or swelling in your legs
- Chills and body shakes
- Active bleeding, increased redness or drainage, or unusual swelling in the area of the incision
- Any allergic reaction to your prescribed medication.

**During work hours (8 a.m.-5 p.m. Monday – Friday) call: UF Health Urology Clinic at 352-265-8240**

**AFTER HOURS OR WEEKENDS CALL:  
UF Health Shands operator at 352-265-0111 and ask the operator for the urology resident on-call**

**Personalized Instructions:**

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