

Patient Education Guide to Testicular Sperm Aspiration / Testicular Core Biopsy

Introduction

You have chosen to proceed with a testicular sperm aspiration (TESA) or testicular core biopsy (TCB). 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 Obstructive Azoospermia (OA) versus Nonobstructive Azoospermia (NOA)

Men with little (oligospermia) or no sperm (azoospermia) in the ejaculate may have an intrinsic testicular production problem (NOA) or an obstruction to the outflow of sperm from the testicle (OA). Hormonal evaluation through blood tests can suggest the cause; however, a testicular aspiration or core biopsy is a diagnostic tool that helps distinguish the two as well as inform the next steps for a man's reproductive course. A local anesthetic is used to numb nerves of the testicle and a small aspirating syringe is used to obtain a seminiferous tubule from the testicle.

If the male has no sperm in the ejaculate, but sperm is found on the aspiration, he may undergo a testicular sperm extraction (TESE) at the time of his partner's egg extraction or separately and cryopreserve the sperm for future use. Men with epididymal obstruction such as congenital cysts and sperm found on aspiration may be considered for reconstruction to bypass the obstruction.

If no sperm is found on the aspiration, a more in-depth search through the seminiferous tubules is warranted with the use of a surgical microscope in the operating room.

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 aspirating syringe is then placed through the skin, into the testicle. Negative pressure is held on the syringe which is undulated (moved up and down) through the testicle several times and then slowly withdrawn from the testicle with a seminiferous tubule (tube from the testicle that makes sperm). The tubule is excised and then minced to release any sperm. The contents are evaluated under the microscope for the presence of sperm.

A small amount of bleeding may be noted at the site of the skin puncture. The results from the procedure are available within several minutes.

For additional information on testicular sperm aspiration, see below:

<https://www.sciencedirect.com/topics/medicine-and-dentistry/testicular-sperm-aspiration>

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:
