

# Patient Education Guide to Microscopic Epididymal Sperm Aspiration

## Introduction

You have chosen to have a microsurgical epididymal sperm aspiration (MESA). This sheet is to help you understand your surgery, 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.

## Why a Microscopic Epididymal Sperm Aspiration?

Microscopic epididymal sperm aspiration (MESA) is a technique for the procurement of sperm from the epididymis of men. It is used for men in whom the sperm drainage system is absent or not amenable to reconstruction. This problem is seen often in men with vasal agenesis, a congenital condition in which the vas deferens or drainage system does not form. It may also be acquired in men who have had a vasectomy or with a secondary blockage that occurs following inflammation or infection.

A MESA procedure is performed through an operating microscope. Sperm are identified within the epididymis from an isolated tubule and directly aspirated until a sufficient number of sperm are collected. Once the sperm have been processed, they may be used for in vitro fertilization (IVF) with ICSI (intracytoplasmic sperm injection) or cryopreserved for future use.

## About The Surgery

An incision is made on the front of the scrotum and the testicle and epididymis are revealed. A surgical operating microscope is used to visualize the epididymis. Dilated tubules within the epididymis are identified and a small, fine-tipped blade is used to open the tubules. An aspirating syringe collects the fluid that leaks out and it is evaluated by a trained andrology specialist for the presence of sperm. If sperm is found, it is collected to be used for IVF with ICSI.

For additional information on MESA with operative video, see below:

<https://www.sciencedirect.com/science/article/pii/S259008971930009X?via%3Dihub>

## Before Surgery

You may need to have an evaluation before surgery at UF Health Shands Hospital on the 1st floor. The evaluation is made up of a physical exam, chest X-ray, blood tests, urine tests, an Electrocardiogram and other tests necessary for your health and safety before surgery. At the time, you will be able to ask questions about your medications and hospital care. You will be told about which medications you should take and which you should not take before surgery. Please bring your medications in their original bottles to the before surgery evaluation.

**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 surgery.**

The day **before** your surgery, you may eat a light breakfast (no later than 11 a.m.). **After breakfast, begin drinking clear liquids (Sprite®, 7up®, ginger ale, apple juice, tea, Jell-O®, ice pops, Gatorade®, chicken or beef broth) for the rest of the day then nothing by mouth after midnight.**

**To find out what time you need to be at UF Health on the day of your surgery call (352) 265-0023 between the hours of 7 p.m. and 11 p.m. the day before surgery.**

## **The Day of Surgery**

### **Check-in and family waiting area**

On the day of surgery, you will get to UF Health at the time you were told. The check-in area is on the 1st floor at the Ambulatory Surgery Check-In desk. You will be taken to the before surgery holding area next to the operating room.

Once you are taken into the operating room and the surgery starts, the family can call from the Surgery waiting area on the first floor and get updates from the operating room every 1-2 hours. Your family members must be prepared to wait.

The surgery itself takes about 1-2 hours. However, it takes at least 1-2 hours to get you ready for the surgery, and you will spend anywhere from 1-2 hours after surgery in the recovery room.

**After surgery, the doctor or a member of the surgery team will talk to your family either in person or by phone. At least one family member should stay in the Surgery Waiting Area on the first floor at all times for the entire surgery so that your doctor can locate them and give them an update on your condition once the surgery is over. If none of your family members are in the waiting area then your doctor will not know where to find them.**

## **Care You Should Perform at Home**

- Apply an ice pack for 20 minutes every hour for the first 24 hours. This will prevent swelling and decrease pain
- Wear snug underwear or athletic supporter for a at least one week
- Shower daily starting 48 hours after surgery then dry the area completely
- No hard/strenuous physical activity until your post-operative check 2 weeks after surgery.

## **Medications Following Surgery**

- You will be prescribed a pain medication for breakthrough pain and an antibiotic which you will take for 3-5 days depending on your prescription.
- Take pain medication as in the instructions for severe pain but use ibuprofen or naproxen 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 surgery.
- If you are on blood thinners, be sure to confirm it is okay to resume this medication prior to restarting.

## **Recovery Following Surgery**

- 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 surgery; however, we want you to have a speedy recovery and not be limited by pain.
- 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.
- Do not take any baths or submerge your incision under water until the skin edges have completely healed (at least 1 week). You may shower 48 hours after surgery and let warm, soapy water run over the area. Pat the area with a towel or drip dry, but do not scrub the incision site.
- Your incision is closed with stitches under the skin a medical super glue on the skin. Both are dissolvable and will flake off on its own over a week or two. Don't pull or tug at the glue or stitches since this can cause your incision to open.
- 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.
- Avoid lifting anything heavier than 10 pounds for the first 2 weeks following surgery. You may return to work as previously instructed.
- Abstain from all sexual activity including masturbation until you are seen for your postop follow-up.

## **Your Follow up Visit Two Week Follow Up**

- Your first appointment with your surgeon will be about two weeks after your surgery.
- At this visit, you will have a post-surgical check of your incision site as well as review your recovery course.

## **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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