EliteCare Surgical Specialists Abdominal Wall Reconstruction (AWR) Program Patient Information and Instructions

Our Goal: Improving outcomes and length of stay using an Enhanced Recovery After Surgery (ERAS) protocol

You are about to undergo a surgical procedure following the concept of enhanced recovery. As a result of peri-operative measures and tools, you will have less side effects from your surgical procedure, a lower risk of complications and a shorter stay in the hospital. In case that an early discharge from the hospital is not possible, alternatives will be explored with you and your family at the time of surgical planning.

Your active participation and involvement will be an essential aspect to achieve the goals of this program.

Below are some important points and details of this program:

In preparation for the procedure at home:

- Please maintain or increase your physical activity by walking at least 1 hour per day or 10,000 steps. Your smartphone, activity tracker or pedometer can help with these goals.
- If you smoke, please stop smoking 4 weeks before the procedure. We are happy to provide you with help to obtain this goal. Smoking cessation improves wound healing.
- Please stop alcohol intake 4 weeks before the procedure.

- Your doctor may have requested weight loss. If you feel you are not meeting your weight loss goals, please contact your nurse or dietician.
- Please be sure to notify your surgeon/nurse if you develop a cough or illness prior to surgery. Failure to do so may result in surgery cancellation.
- Wash your hands and avoid large crowds to prevent getting sick prior to surgery.
- We encourage you to get a flu shot if you are eligible
- Decide who will drive you home and stay with you for at least 24-48 hours after surgery
- Make a meal plan and prepare ahead of time

Shopping List:

- Oral Thermometer
- 2 Extra-Large Soft Ice Packs
- Elastic Waist Pants
- Water, Jello, Popcicles, Pedialyte™ and other clear liquids to help keep you hydrated

Before the procedure in the hospital:

- Be aware that an intestinal preparation is not necessary in most cases.
- Please do not consume anything by mouth beginning at midnight the night before your procedure.
- Taking a pill against stress and anxiety is not recommended the day nor the morning of the intervention. Its effect frequently remains active after the surgery and does slow.

down your recovery process. Talk to your nurse or your Primary Care Provider about your medications.

- We will give you 3 pain medicines to take prior to coming into the operating room and potentially a scopolamine patch to help reduce nausea. Please do not touch the scopolamine patch with your fingers. You can have small sips of water with these medications. The goal by giving these medicines is to have a baseline of pain control during the surgery which should decrease opioid use.
    - 975mg Acetaminophen (Tylenol)
    - 900mg Gabapentin (Neurontin)
    - 200mg Celebrex

During the procedure:

- For your procedure, we will give preference to a minimally invasive approach whenever possible. This is done through small, 1cm long incisions using laparoscopic or robot-assisted surgical techniques avoiding large openings of the abdominal wall. This technique reduces the trauma of surgery, postoperative pain, and blood loss. However, a conversion to an open approach may be necessary in some cases.
- We will rely on an efficient pain management that will be started even before the surgery begins.
- We typically perform abdominal wall nerve blocks using local anesthesia to provide pain relief during and after the case. This will leave no visible scar.
- We limit opioids in and out of the operating room since they have been shown to be linked to postoperative nausea and vomiting.
- In case that you feel pain after the procedure, we would like to invite you to keep us informed about this situation so we can adapt the pain protocol to your needs. The

reduction of pain is an essential aspect that will allow your early mobilization and with this your improved recovery. You will, however, have some pain in general. It is impossible to completely remove the stimulation of pain without inducing anesthesia. We hope that the pain will decrease to nothing over the next several days, but it is possible for it to persist for weeks.

- The same approach is used for postoperative nausea and vomiting. We will start measures against this situation before the procedure starts. In case that the treatment is not sufficient, please keep us informed, so we can adjust the protocol to your needs.

After the Procedure, Same-Day Procedures:

- You will arrive in the Post-Anesthesia Care Unit (PACU) and as you wake up you will be given some juice or water to drink, and potentially some crackers to eat.
- Once deemed appropriate by the peri-operative nurses, they will discharge you home.
- The prescriptions will be sent electronically to the pharmacy you have on file
- We will send you home with
    - Zofran (Ondansetron), which is a dissolvable pill to use for nausea
    - Colace (Docusate Sodium), which can be purchased over the counter to help with any constipation
    - Take 650 mg Tylenol (acetaminophen) every 6 hours and ibuprofen 800 mg every 8 hours with a small meal. Please do not consume more than 3000 mg of Tylenol/Acetaminophen in any 24h time frame.
    - Take any prescribed opioid only as needed for break through pain.

Overnight Hospital Stay Surgeries (Outpatient Observation):

- Sometimes your surgeon may want to monitor you overnight in the hospital for usually no more than 23 hours.

- As soon as you return to your room, we will offer you a diet: either clear liquid or full liquid.

- We will also encourage and help you to get out of bed or in a relaxing chair. This mobilization will help you to shorten the time for reactivation of your digestive function, reduce the risk of nausea, allow early food intake, lower the risk of pneumonia and lower the risk of blood clots.

- You will be provided an Incentive Spirometer (IS). The purpose of which is to help you purse your lungs open (imagine inflating a balloon) to prevent atelectasis (lung collapse) and/or pneumonia. You should take 3 deep breaths every 15 min (or every time a commercial comes on TV) while you are awake. We do not want you excessively coughing after this surgery. Please notify your nurse if this occurs.

- You might receive all medical treatment by mouth only. If you have an IV line, it will be removed as soon as possible.

- You should wear sequential compression devices (SCDs) and compression stockings (TEDs) all the time while in the hospital following the procedure, except while walking.

- You will be given an abdominal binder – an elastic band wrapped around your abdomen. Please wear this while ambulating for comfort. It is ok to take it off while lying down. If you need an extra, there are several online retailers from which you may purchase one.

- A blood test might be done in the evening or the next morning after the procedure prior to discharge.

The day after the surgery:

- Starting on postoperative day 1, your diet will be advanced and you should aim to drink 1.5-2 liters (6-8 full glasses) of fluid (preferably water) during the day. You should remain out of bed at least 6 hours during the day and walk around the unit or your home hourly while awake.

- If the procedure allows, drains, catheters and IV lines will be removed, and you may be discharged.

- The reappearance of bowel movements might take up to 3 days after the surgery. The absence of bowl movements is not a reason to keep you in the hospital. Remember “Motion is the potion” - walking is the best way to achieve a bowel movement.

- The day of your discharge, you will receive your appointments for your follow-up visits if you do not have them already as well as the necessary papers for your postoperative care by your family practitioner, nursing staff, etc.

After return to your home:

Blood Thinner: You may have received and been prescribed injections of a blood thinner once a day to lower the risk of thrombosis /phlebitis (clots) as well as pulmonary embolism (a clot in the blood vessel of the lung) during the 4 weeks after surgery. If you have any coffee ground appearing vomit, bright red, bloody or maroon appearing stools please notify the office and go to your nearest emergency room. You will bruise easily. Take fall precautions, such as removing scatter rugs and cords that can be tripped over. Have someone walk with you to the restroom, especially at night. Do not consume any mind-altering medications or sleep aides without first speaking to your nurse or surgeon. These include: benedryl, klonopin, clonazepam, lorazepam, valium, diazepam, Ativan, flexeril, soma etc.

Temperature: Take your temperature twice daily without having consumed any food or liquids for a full 10 min prior. Be sure to monitor your temperature when pain medications have worn off.

Diet:

Begin your diet with bland foods that are easy to digest. Drink plenty of fluids (64oz or 8 cups per day). Remember – broth, jello and popcicles are all considered fluids. Slowly advance your diet back to a normal heart healthy diet.

Incision Care:

- Please keep your incisions clean and dry.
- You may shower 24 hours after surgery. Allow the water to run over the incisions and then pat dry, do not scrub.
- If you have a Drain, cover the insertion site with a clear plastic bandage prior to showering.
- Do not pick off the Dermabond (glue) or Steri strips- this will fall off over the next two weeks.
- Do not apply ointments to your incisions.
- Avoid soaking incisions (I.e. No baths, swimming or hot tubs etc.) until completely healed after 4 weeks.
- Notify your surgeon if there is increased discoloration, redness, swelling, pain, or drainage from your incisions.
- Never leave a wet bandage on your skin. Replace it with a clean dry dressing as needed and report drainage to your doctor.

Drain Care:

- If you have a drain – it is sutured to your skin, however, tape the tubing to the outside of your abdominal binder to keep it from hanging or pulling (do not use safety pins).
- Empty the drain 2-3 times daily and record the amount on the log that is given to you be the nursing staff when you leave the hospital (see the last page).
- The drainage will look like blood for up to 3 days. It will then begin to clear up and look like fruit punch. Then it may become a clear yellow. Sometimes you will see thick strands of fat or clot run through it, and this is normal.
- If the drain is clogged and not flowing – wash your hands, hold the drain near the skin (so as not to pull it out) and strip the drain by pinching and running your fingers down the tubing. This should unclog it.
- If the drain stops working, monitor for increased swelling around the site or in the abdomen. Sometimes you do not have any more fluid to empty and this can be a good thing.
- Sometimes drainage/fluid will leak out of the opening surrounding the drain. This is ok – just keep it clean and dry. You can use saline wound wash and gauze or an alcohol swab to cleanse around it.
- If you have any questions, you may call us at (301) 215-0127or message your provider during business hours through your patient portal.
- If the drain falls out or you accidentally pull it out – notify your surgeon immediately. Do not go to the emergency room. This may just be monitored.
- The drain will typically be removed in the office at your 1 week follow-up appointment. Be prepared with Motrin, Tylenol and ice. Do not drive to this appointment.

Activity:

- Avoid lifting more than 10 pounds for 8 weeks (i.e. nothing more than a gallon of milk).
- It is ok to walk up the stairs with the proper assistance (if needed).
- Do not drive while taking narcotic pain medications.
- Be sure to take focused deep breaths to avoid low-grade fevers (99.9) and prevent pneumonia. You may have been given an incentive spirometer at the hospital. If so, do three deep pursed lip breaths every 15 min while awake.
- Ambulate around the house at least once an hour to prevent blood clots.

Pain Management:

- Utilize your pain medications only as prescribed (if prescribed).
- Non-opioids will be emphasized for primary control, including both Tylenol and Ibuprofen, which should be taken around the clock for the first 1-2 weeks until improved soreness.
- Apply ice packs as needed for no more than 20 minutes at a time as needed for pain or prior to walking.
- If you were prescribed Motrin, you can overlap this with the Tylenol by alternating them every 3 hours to help with the inflammatory pain. This allows for a baseline of pain control always. You can wean off of these when the pain becomes a soreness.
- Wear your abdominal binder except when showering – this will help with the pain, especially when ambulating.

- Remember, your abdominal muscles are busy recovering. You may have some back pain as a result, especially if you had it prior. You can alternate ice and heat on your back. See your primary care for back pain otherwise.

- Use a chart to manage your pain medications, writing down the last time you took a dose and when the next medication is allowed. Ask a family member to assist you with this.

- If you receive Percocet and Norco, they contain Tylenol (acetaminophen). The maximum acetaminophen or tylenol one person can have in a 24 hour period is 3000 mg. If you add Tylenol to your regimen, please keep a running log of this.

Constipation Management:

- Take a stool softener such as Colace (Docusate Sodium) if you are using a prescription narcotic or as needed for constipation. Colace is an over the counter stool softener. It works by making stools softer and less brittle. You may take 100 mg of Colace by mouth twice a day as needed.

- Increase ambulation, if possible.

- Drink 8 full glasses of fluids per day.

- If you have not had a bowel movement in 2-3 days AND you are able to pass gas, you may try an over the counter laxative of choice, (i.e. mineral oil, milk of magnesia, miralax or senna). You may try prune juice or aloe vera juice.

- Please do not strain or bear down too much to have a bowel movement. This is why we prescribe stool softeners.

- If you cannot pass gas and are experiencing nausea, vomiting and abdominal distension, please call the office and come to the emergency room.

Cough: If you develop a persistent cough, please see your primary care physician right away. Cough needs to be controlled so as not to risk your repair.

Call our office immediately at (301) 215-0127 if you develop any of the following or have any questions or concerns: (Please do not use MyChart for urgent matters)

- Fever >100.4.
- Redness surrounding incisions, drainage that is green, yellow, or foul smelling.
- Bleeding from your incisions (hold pinpoint pressure for 10 minutes first. This typically resolves all bleeding).
- Vomiting or persistent nausea.
- If you are unable to urinate more than 6-8 hours after surgery, especially with pubic pressure.
- Severe abdominal pain unrelieved by prescription medications.
- Large bruising or discoloration.
- Overall you feel that you are getting worse each day.

Call 911 for the following:

- Chest pain
- Shortness of Breath or Difficulty Breathing
- Trouble speaking, weakness on one side of your body or both, changes in your vision
- Uncontrolled bleeding

A team helping you through surgery:

All members of your hospital team: surgeons, anesthetists, nursing staff, dieticians, physiotherapists, etc. are actively contributing to the success of your procedure and treatment. However, your own participation and compliance with our program are the essential aspects to render your intervention more comfortable and safer for you, and at the same time less painful, less aggressive and at a lower risk of complications. We thank you for your participation to obtain these goals.

Long Term Recovery:

Your surgeon will want to see you back for the following appointments:

1 week _____

1 month _____

6 months _____

1 year _____

Don't forget – it will take 6 months for the mesh to scar into place. Your body will be healing from any surgery for about year (you may not realize this). You should feel more yourself after the first 6-8 weeks. You will have inflammation for about 6 months. If you overdo it and get a recurrence of some mild pain – reduce the inflammation with ice, Motrin or Tylenol (if possible) and rest. If pain persists, make an appointment with your surgeon or call your nurse. If you are worried – we are worried. Give us a call.

What you should know about mesh:

There is much conversation regarding mesh in the media today. Most lawsuits quoted in television commercials are regarding mesh for vaginal slings. However there is always a risk of mesh complications. We have studied and implemented surgery which reduces this risk substantially.

Our surgeons have refined an approach which places the mesh in a location which has no contact with the bowel. This can be performed laparoscopically or with a robotic approach. The layers of musculature and connective tissue of the abdominal wall are dissected, and the mesh laid between them. This provides a natural barrier between the mesh and the intestines. The hernia defects (weakening of the abdominal wall musculature) and diastasis recti (thinning of the connective tissue between the midline rectus muscles) are sutured closed.