

Chest Masculinization Guidebook: What to Expect – Armstrong Edition

Chest masculinization is a surgery that typically involves mastectomy to remove breast tissue, contouring to ensure a smooth and masculine look to the chest and may or may not include changes to the nipple. There are a number of different techniques used to create a masculine chest and this is unique to each person's anatomy and goals. This booklet is designed to help you better understand what the surgical journey at WCH will look like and to support you in your recovery from chest masculinization surgery. We want you to have a quick and healthy recovery to get you back to your pre-surgical routine as soon as possible.

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PREPARING FOR SURGERY

- In the interest of achieving an optimal surgical outcome with the least chance of complications, not smoking cigarettes/ingesting nicotine is very important. Ideally you would be nicotine free

for at least **4 weeks** prior to surgery and **4 weeks** after surgery. Talk to your doctor, nurse, or the TRS Social Worker about how they can support you to quit.

- Alcohol and drug use should be eliminated **2 weeks** prior to surgery and during your recovery.
- Support is very important for recovery from surgery. Ensure family and friends are there to help. After surgery you will need someone to bring you home and stay with you for 24 hours. It is good to prepare some meals beforehand.

You MUST have a responsible adult to escort you home from your surgery and stay with you overnight. For your safety, you are not permitted to take a taxi home without an escort. Your procedure will be cancelled if you do not have an escort home.

NIGHT BEFORE SURGERY

Unless instructed otherwise:

- Do not eat after midnight the day before your surgery
- You may drink clear fluids up to 4 hours prior to your surgery time. Clear fluids include water, apple juice, black coffee or tea and clear pop. Do not drink any milk or dairy products, orange juice or other citrus juices. Do not drink any alcohol.
- Do not take anything orally for 4 hours prior to your surgery including gum, candy or water.

DAY OF SURGERY

Check-in at the Surgery reception desk on the 8th floor. You must arrive in Surgical Daycare 2 hours prior to your surgery time, unless instructed otherwise. On the day of surgery, you may take your medications as instructed by the physician, with small sips of water. You should bathe or shower the night before and/or the morning of your surgery.

What to bring to hospital

- Health card
- Comfortable clothing (i.e. sweatpants, large button up shirt) and shoes to wear home
- Clean socks to wear during your surgery (it can get cold)
- Medications
- Containers for your glasses/contact lenses, hearing aids etc. which must be removed prior to surgery

Chest Masculinization Schedule

The following schedule is a guideline of what your surgical journey might look like. It is not the same for everyone but will give you an idea of the major milestones so that you can prepare.

Consultation Visit	<ul style="list-style-type: none"> Meet with the surgeon, nurse practitioner, and/or social worker for pre-surgical planning and a physical exam. After this consult, if you want to proceed with surgery, call the surgeons medical secretary to discuss booking times.
Pre Admission Clinic	<ul style="list-style-type: none"> This appointment usually occurs in the weeks before your surgery. It may be an in-person or phone appointment. You may meet with different members from the surgical team including anesthesia and pharmacy You will need to pay or have already paid for the surgical binder and the chest contouring fee, if applicable
<i>Private Office Visit</i>	<ul style="list-style-type: none"> Some surgeons may ask to see you in their private office prior to surgery. Among other things they will take photos and sign consent for surgery here.
Tasks before surgery	<ul style="list-style-type: none"> Cease smoking (i.e., nicotine and cannabis) for 4 weeks and other substance use for 2 weeks prior to surgery Ensure you have a support system in place for the day of surgery and 24 hours following procedure
Day before surgery	<ul style="list-style-type: none"> Shower
Day of surgery	<ul style="list-style-type: none"> Nothing to drink four hours before surgery Arrive at the hospital two hours prior to your scheduled surgery time Surgery usually takes approx. 3 hours After surgery, you will go to the Post Anesthesia Care Unit before being discharged home A support person needs to accompany you home and stay with you for 24 hours
First week after surgery	<ul style="list-style-type: none"> Ok to adjust your binder if it is too tight or too loose Ok to take up to 3 hour binder breaks Take medications as needed and focus on resting Pain expectations: 0-2/10 if resting; up to 5/10 if walking around or opening a fridge door for the first 3 days after surgery Eat a diet that is easy to digest, nutritious and high in fiber (i.e. fruit, cereals) Walk and perform normal daily activities (no heavy lifting >15 lbs, pushing or pulling) Monitor your drain outputs (IF you had a keyhole/subcutaneous mastectomies) If you had a keyhole or did NOT have nipple grafts, you can shower 24 hours after surgery If you had nipple grafts, you cannot shower for the first week (but you can wash other areas while keeping the nipples dry)
Clinic Visit – 7 days after surgery	<ul style="list-style-type: none"> Visit with surgeon or nurse practitioner For keyhole or periareolar: removal or drains (<=20ml for 24 hours) For double incision: removal of nipple dressings and replacement with new dressings (Vaseline and gauze); Protect nipples from shear or rubbing forces, they are still delicate ALL patients can shower 1 week after surgery, once the dressings are removed.
Second week after surgery	<ul style="list-style-type: none"> Begin the first set of exercises (provided later in this workbook) Increase daily activity, while remaining mindful of your limited range of motion Continue wearing binder, ok to take breaks for up to 3 hours Apply Vaseline and gauze to nipples daily Steri-strips may begin falling off as you shower more – can trim if needed
Third week after surgery	<ul style="list-style-type: none"> Begin additional exercises in this workbook If scars have fully healed, begin scar massage (explained later in workbook) and/or silicone sheets Continue nipple care Gradually return to normal activities
Four weeks after surgery	<ul style="list-style-type: none"> Stop wearing binder You may begin engaging in regular exercise again You may begin to swim, soak in a tub, or a lake

General Guidelines

During recovery, finding a balance between rest and activity is essential. For instance, it is important to continue to use your arms for everyday activities however you should not be lifting heavy items.

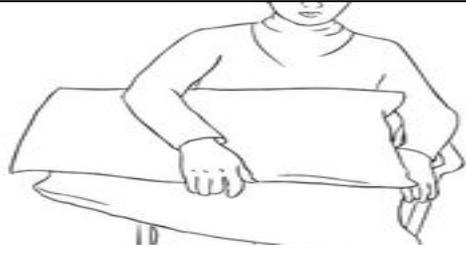
Remember: Do not lift anything that weighs more than **15 lbs for 4 weeks** after surgery.

Plan to have some support with daily tasks after your procedure such as cleaning, cooking, doing groceries, laundry etc.

Post-Surgical Swelling control

You may notice swelling and bruising immediately following surgery. This is to be expected and should resolve in time.

Support: For the first few days after surgery, it is helpful to comfortably elevate your arms by using 2-3 pillows for support and to minimize post-op swelling.

Lying on your back: place a pillow under the full length of your affected arms	Sitting: place pillows or cushions under your arms at the level of your heart
	

Ice: Icing the area can help with both pain and swelling. Apply ice to the chest area for 10 minutes at a time. Ice should **NOT** be applied directly to the skin. Wait at least 1 hour between each application.

Activity: Both rest and slow gentle movements support a good recovery by maximizing the effects of medication, reducing stress, and reducing pain and swelling.

Pain

Pain after surgery is normal. The level of pain each person experiences is different. Most patients describe pain levels of 0 to 2 out of 10 if resting and 5 to 7 out of 10 if getting up, walking around or opening a fridge door. This usually tapers off by post op day 3. It is common to have burning and tingling in the chest area and under the arms caused by irritated nerves. This is normal and should improve in time. Relaxation, deep breathing exercises, the presence of a loved one, taking prescribed pain medications and using your arms in your everyday activities may also help improve your pain levels.

Medications

You will be prescribed different types of medication for your pain. Follow your prescription or consult a pharmacist to ensure you are taking a safe dose.

Acetaminophen (Tylenol) is an excellent medication to relieve pain after surgery. Take it regularly for the first week. ****It is ok to use Advil/Ibuprophen in conjunction with Tylenol/Acetaminophen.**

Opioid medications (Tramadol) are often prescribed for a short duration after surgery. Continue to take the other medications you are prescribed even while using an opioid. Typically, this medication is most needed in the first day or 2 after surgery and is used when the other medications you are taking are not providing enough relief. If the other medications are working well to relieve your pain, then there is no need to take opioids.

Binder

For approximately 4 weeks after surgery, you will be instructed to wear a post-surgical binder. You will purchase the binder prior to surgery but will not be given the binder until the day of surgery. The binder will be placed on you in the Operating Room and you will wake up from surgery with it on. You will go home from surgery wearing the binder. The purpose of the binder is to reduce swelling and remind you that you had surgery. Wear the binder as much as possible during the first few weeks after surgery. It is ok to remove the binder for short breaks when at home and resting. It is ok to remove the binder for 3 hours to wash and hang dry. The binder should feel comfortable (not be too tight or too loose). For the first week it will be sitting over your post-surgical dressings. After these dressings are removed, you can put the binder over a t-shirt, a large abdominal pad or other soft materials. If you have nipple grafts, this will prevent shear/rubbing forces.

Dressings and wound care

Dressings

If you have had a mastectomy with a nipple graft, the dressings covering the nipples and the larger dressings over the chest incisions will be removed about a week after surgery (see nipple care).

Sutures

Your surgical incisions have been closed with dissolvable sutures which may take 30-90 days to completely dissolve. Sometimes a dissolvable suture is visible on the outside of skin. You may clip the suture at the skin if it is visible.

Nipple Care (if surgery includes nipple grafting)

Week 1: After your surgery, you will have a dressing on your nipple for the first week until your post-surgical follow up visit. This dressing is put in place to help hold the skin graft in place and to prevent movement of the graft on the underlying tissues. This allows the blood supply to work into the graft.

A health care provider will remove this dressing during your clinic visit at approximately 7 days after your surgery. The chest area feels relatively numb at this point. Nipples will often look quite dark in colour at this time or covered in a crust – do not be alarmed. This will improve over the next month.

Week 2 to 3: After the nipple dressings are removed, to prevent the area from drying out, apply Vaseline to the nipple area 1-2 times per day for 2 weeks. Cover the area with a light dressing/gauze to protect the nipple from rubbing on your clothes and to keep the Vaseline in place. Taping the dressing/gauze is generally not needed as the binder typically will hold the dressing in place. You may notice some skin flaking off – this is normal. Scabbing that has formed typically falls off independently in 1-2 weeks, allowing new skin to appear. Bruising and red, raw areas are also normal.

Hygiene

Week 1: You may not shower as long as you have the nipple dressings on. You may sponge bathe the parts of your body that are outside of the binder / surgical site. **Keyhole / subcutaneous mastectomies patients can shower 2 days after surgery with the drains in.

Week 2: You can take a shower typically one week after surgery. Soap and water can fall over everything. Carefully pat-dry your wounds (never rub your nipples) with a clean towel and let your skin dry in the open air.

Week 4-6: Once your wounds have completely healed, you may begin soaking in a tub, swimming in a pool, hot tub or lake.

One year: Avoid exposing your scars to sunlight for the first year after surgery.

Diet

In order to prevent nausea, begin with a light diet consisting mainly of broths or soup, crackers, and Jell-O. You can resume a regular, balanced diet as soon as you feel comfortable to do so. Don't forget to add fluid and fiber to your diet to help prevent constipation from your pain medications.

Constipation

Taking opioids for pain and the reduction of physical activity can lead to constipation. To prevent constipation and return to regularity:

- Drink at least 2-3 liters of water a day
- Increase your daily intake of fiber with fresh or dried prune juice, high fiber cereals (e.g. Fiber1) and fruits and vegetables
- Reduce consumption of foods that are high in fat and sugar
- Reduce consumption of caffeinated beverages like coffee, tea and soft drinks
- Avoid alcohol as it contributes to dehydration
- Establish a regular routine of physical activity
- Take Acetaminophen and other pain medication regularly to reduce the need for opioids

Driving

You must not drive for the first 24 hours following surgery - **at minimum**. We recommend waiting **2 weeks** after your surgery before driving a motor vehicle in order to be able to perform unimpeded movements. Our ability to react quickly can be affected by pain. You cannot drive if you are using opioids.

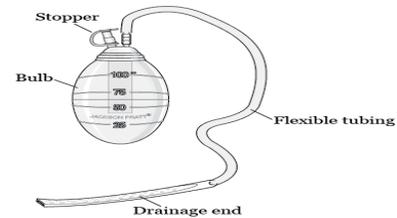
Alcohol and Tobacco

Avoid consuming alcohol for **2 weeks** following surgery. Mixing alcohol and medications can cause unpredictable and undesirable reactions.

We strongly advise that you **do not smoke for 4 weeks** following your surgery. Toxic substances in tobacco can tighten small blood vessels and compromise wound healing; and cause excessive coughing after surgery. Nicotine substitutes can have the same harmful effects on blood circulation as cigarettes. We advise avoiding them during this period.

JACKSON-PRATT DRAIN ****only for keyhole/subcutaneous and periareolar mastectomies**

The Jackson-Pratt drain is a tube equipped with a bulb that provides a constant suction. It is inserted, usually from a small incision below the surgical area, and the drainage area is positioned into the chest. It is used to:



1. Prevent the accumulation of fluid in the wound and reduce the risk of infection.
2. Allow you to measure the amount of fluid draining from the wound.

You will be given a separate handout on how to care for the drain. Ensure that you wash your hands before and after touching your drains or dressings. Do not take any baths or showers as long as the drains are in place.

Sometimes the tubing from the drain can irritate and even blister the skin if it is directly in contact with the skin. Putting gauze or a dressing between the tubing and the skin is helpful to prevent any skin breakdown.

The drain will be removed by someone on the TRS team or by a healthcare provider in the community around 4-7 days after your surgery. **The typical time to remove the drain is after it has been draining under 20mL in a 24 hour period for 48 hours.** Removal of the drains tends to be well tolerated and relatively painless but you can take pain medication prior to this appointment for extra support.

Infection of the wound

After the first week, check your incisions every day for infection and continue to do so until your wound has completely healed. Signs of infection include redness, feeling the sensation of heat, excessive pain, swelling (at the surgery site and its perimeter), foul smelling pus discharge, increased pain at the surgery site, chills and a fever of over 38.5C for more than 24 hours. If you are having signs of infection, please contact your TRS team or go to the nearest emergency department.

When to seek emergency care

If you have questions or concerns about when to seek emergency care – please contact your TRS team. Most issues that people access emergency services for are not an emergency and should not be managed in the emergency department.

The following are potential emergencies:

- Rapid increase of significant swelling on one side of the chest versus the other

The following are potential urgent issues that you can contact the TRS team about:

- Signs of infection including: fever > 38.0C, redness that expands to normal skin, foul smelling drainage
- Nausea or vomiting that won't stop
- Inability to urinate
- Severe constipation

- Pain that keeps worsening that is not relieved by pain medication or adjusting the drains or dressings

Issues that are not an emergency

- **Pain at the drain sites.** This is a common site to have pain after surgery. Ensure there are no signs of infection at this site, that the tubing is not pressing directly against your skin (put some gauze in between your skin and the tubing), that the tube is not pulling and there is not clotting in the tube preventing the tube from draining.
- **Asymmetrical swelling.** Small differences from one side to another is normal. Unless one is swelling rapidly – this is not an emergency.
- **Getting your drain out.** If your drain stops draining and is ready to come out please make contact with your TRS team. Even if it is not draining, it does not have to come out immediately (even though you might want it to!). Please wait to make an appointment in the next day or two for its removal.

MOVEMENT AFTER SURGERY

It is important to stay mobile after your surgery. For the first couple of days after surgery you should still ensure that you are by getting out of bed to sit in a chair and taking short walks in your home.

Participate in self-care activities as you are able to, such as dressing yourself, brushing teeth, etc. After those first few days after surgery, you should be walking and moving as much as possible and according to your schedule and tolerance. The benefits of staying mobile after surgery include keeping your lungs clear, maintaining your strength, and preventing post-operative complications (e.g., blood clots in your legs). At 4 weeks after surgery, you can start more intense physical activity again. Be mindful of your body's limitations and do not push yourself if you are experiencing any pain.

Rehab Exercises

Engaging in the exercises described below after surgery can be very helpful. They can prevent tightening of the muscles and soft tissue that have been operated on and help improve recovery. Studies have shown that doing exercises prescribed by your healthcare provider after surgery improves function, quality of life and reduces pain. We expect that you may experience some discomfort and tightness while doing your stretches. If this discomfort is preventing you from completing your exercises, try doing the exercises approximately 20-30 minutes after taking your pain medication or after a warm shower. The tightness should improve over time while continuing to do the exercises. In order to prevent or minimize this tightness, it is important to do your exercises regularly.

Deep breathing exercises

There are numerous benefits to doing deep breathing exercises during your recovery period. First and foremost, these exercises can help to keep your lungs clear and fully expanded after surgery. Breathing awareness and good breathing habits will also enhance your psychological and physical well-being, including helping to control your pain, improving relaxation, and reducing swelling. You are encouraged to continue deep breathing exercises throughout your treatment, either alone or in combination with other relaxation techniques.

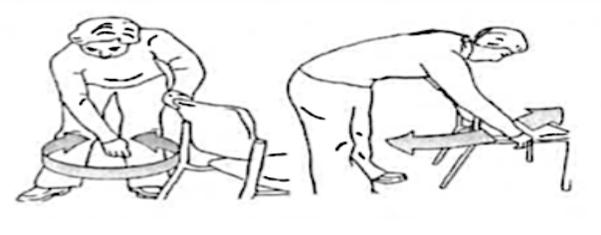
Try the deep breathing technique 10 times every hour that you are awake for a minimum of 2 days after your surgery.

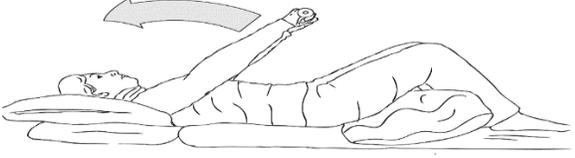
Deep breathing technique:

- Inhale through your nose deeply all the way to the bottom of your spine, filling your lungs- bottom, middle and top
- You should feel your abdomen, rib cage and back all expand
- Hold your breath for a slow count of 2
- Breathe out through your mouth like you are blowing out candles (you should feel your tummy fall “inwards”)
- With each exhale, allow any tension in your mind and body to soften, loosen, and release

AFTER ONE WEEK you may start doing the following exercises. Be gentle with yourself. Exercises should be done in a pain-free range of motion. Exercises may be done in front of the mirror to maintain good posture. Breathe deeply as you do the exercises.

Do all exercises 3 times per day, 5 repetitions each. Hold these exercises for 30 seconds or take 3-4 deep breaths.

<p>Neck stretches (if you have any neck problems, do not do this exercise) Bend your head to the side as if your ear is trying to touch your shoulder. Repeat on the other side.</p>	
<p>Shoulder (shrug) circles Try to bring your shoulders up towards your ears. Hold for 3 seconds and then relax.</p>	
<p>Hands behind back With one arm, reach behind your back. Try to slowly bring the hand up the back as if trying to reach the opposite shoulder. Return the arm to your side. Now try to touch the back of your neck and slowly reach the hand down the back. Return the arm to the side.</p>	
<p>Pendulum swing Stand or sit leaning forward. Support your upper body with one arm and relax your shoulder muscles. Allow the other arm to dangle freely side to side, front to back, clockwise and counter clockwise.</p>	

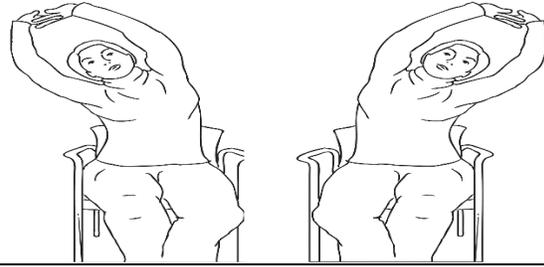
<p>Arm forward-assisted lift Hold a cane or stick with your hands, shoulder width apart. Gently lift the stick up in front of you as high as you can and reach behind your head.</p>	
<p>Snow angels Pretend that you are making snow angels. Both your arms should be at the side of your body and your thumbs pointing outward. Move your arms upward and away from the body, leading with your thumbs. Do not hike your shoulders, and try to stay in contact with the bed or floor.</p>	
<p>Shoulder retraction and depression Facing straight ahead, arms should be at your side with elbows bent. Squeeze your shoulder blades together and down, bringing your elbows behind you. Tip: imaging that you are trying to hold a pencil between your shoulder blades.</p>	

AFTER 3 WEEKS: You can start working on re-gaining full use of your shoulders. By 6 weeks post-op, you should have full movement in your arms and shoulders. It is normal to experience a “pulling” or “stretching” sensation in your chest and armpit area when doing these exercises. This should feel like a “good stretch” but should not be painful. Warming up before stretching can ease discomfort. It is recommended that you do these exercises AFTER a warm shower, or after doing an activity with your arms for about 5 minutes.

<p>Wall climb exercise Stand facing a wall and “walk” one hand up the wall. Lean into the wall while keeping the elbow straight, and try to touch the armpit to the wall. Alternatively, you can continue using the cane while lying as with the first set of exercises, and bring the cane up over your head.</p>	
<p>Doorway stretch Stand in a doorway and place each hand on either side of the door frame. Slide your hands up to shoulder height. Lean forward until you feel a slight stretch across the chest.</p>	
<p>Towel pull Hold a towel with both hands behind your back. Pull gently with your top hand toward your head. Reverse arms and repeat.</p>	

Show angels or side bends

You can continue with snow angels as in the first set of exercises, but if you are finding those easy try clasping your hands together overhead. Bend at your waist and move your body to the right, then to the left.



Six weeks after surgery, it is important to begin strengthening your upper body and core muscles. This will prevent future chronic shoulder and back pain. You can now begin to re-introduce fitness into your life, including strengthening and endurance activities. You no longer have any weight restrictions.

Scar management and sensation

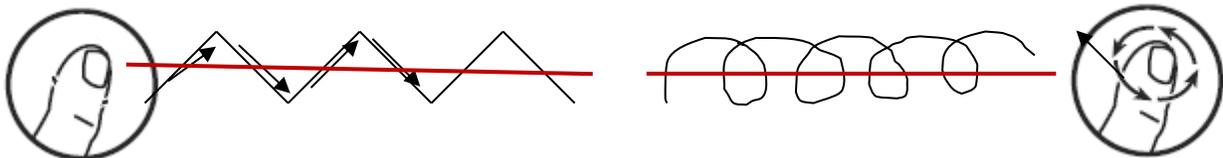
Your level of scarring will depend on the type of procedure along with your specific skin propensity towards scarring. Your scars will appear dark and bumpy for the first few months after surgery. However, over the course of 12-18 months, they will gradually fade, flatten and become less noticeable.

Scar massage can help to improve healing and scar outcomes. It involves rubbing and moving the skin and underlying tissue in a firm but gentle manner at your incision site. Massage of the area is believed to eliminate the tethering of scars and increase blood supply to the area. The benefits of scar massage include enabling your scar to become flexible and soft, which will enhance your ability to regain movement in your shoulder area more comfortably. Your scar may feel sensitive, tight or itchy. Scar massage can lessen any discomfort and sensitivity. Using non-perfumed, alcohol-free moisturizer when massaging can help keep your scar moisturized and prevent it from drying out, which can cause an itching sensation. Silicone sheeting or scar gel can also treat scars because they keep moisture in which prevents collagen build up.

TECHNIQUE: You may begin to massage the scar as early as **three weeks** after your surgery provided the incision is completely closed with no scabbing. Apply a small amount of lotion (e.g. Vaseline petroleum jelly) to the pads of the index and middle finger. Apply a firm but gentle pressure in a zig-zag pattern in one direction and a circular pattern in the other direction.

Repeat the process across the entire scar. Pay particular attention to any hardened or raised areas on your scar.

Do the massage 2-3 times per day for 2-3 minutes, preferably before you do your exercise.



Once you are comfortable massaging with lotion, try the same pattern **without** lotion moving the scar over the tissue surface below. The purpose of this is to ensure that the scar does not attach to the underlying tissue.

Scar Sensation and Sensory Re-education

You may experience a variety of sensations at and around the site of your surgery. This is common and will often resolve with time. However, there may be some residual sensation changes that do not go away. Sensations may include:

1. **Incision sensation** – sensation changes at the incision site e.g. feelings of heaviness, numbness, tingling ‘pins and needles’ and burning.
2. **Referred sensation** – as above in the upper arm, forearm, hand, shoulder blade or ribcage area on the side of the surgery.
3. **Phantom sensation** – you may have sensations in the chest or nipple area.

Be careful with extreme temperatures such as hot/cold packs, hot water bottles etc. at your incision site due to the altered sensation and numbness.

NOTE: If your scar becomes extremely sore, red, hot, or if you experience blisters, scar re-opening, a fever or a skin rash, please stop the scar massage and contact your TRS team.

My TRS Team

Surgeon: Katie Armstrong (416)323-6055

Nurse Practitioner: Emery Potter (416)303-1543 or (647)323-6400 ext 4339