Hi, my name is Jen Dalke and I work as a Certified Lymphedema Therapist at the Winnipeg Regional Health Authority Breast Health Centre. I am one of two therapists that manage Lymphedema at the Centre.
For those of you that have watched the Before Breast Surgery session, you will know that lymphedema is a chronic condition that can happen to your body after breast surgery. It is impossible to know for sure who will and won’t develop lymphedema, and while it is a life long condition, it is manageable with proper care and maintenance.
Lymphedema can occur when the normal lymph flow becomes impaired and lymph fluid starts to accumulate.

As a lymphedema therapist it is my job to stimulate your lymphatic system and help your body move excess fluid from the affected area.

This presentation will provide information about breast cancer related lymphedema. It will include how you can reduce your risk of developing lymphedema through exercise and good hygiene habits. I will also outline how our lymphedema program works and who is eligible to access it.
First, I’d like to start by re-explaining the lymphatic system. The lymphatic system runs parallel to the veins and picks up fluid that leaves the venous system and enters the spaces between the tissues. Specific parts of the body drain to specific lymph nodes, and do not cross into other areas unless encouraged through manual lymph drainage. It is your body’s “sump pump”, as it picks up fluid from the cells that contains proteins, dust, dyes, dead cells and long-chain fatty acids. This fluid gets moved along lymph vessels to the lymph nodes and eventually makes its way back to the heart and circulatory system.

Lymphedema occurs if the normal lymph flow becomes impaired, then lymph fluid can start to accumulate. This impairment can result after the removal of lymph nodes, with radiation, infection, cording (also referred to as axillary web syndrome), advanced cancer, obesity, trauma or injury to the lymph vessels. The areas typically affected are extremities, in the arm of the surgical site, but may affect other parts of the body (chest wall or abdomen/trunk).
Infections can increase your risk of developing lymphedema. Sometimes infection happens right after surgery at the site of the incision(s). Infections can also result from a cut, scrape, bug bite, or dry skin that cracks. All it takes is a break in your skin to allow bacteria an entry way into the body, which is why it is important to take good care of your skin and nails.

- Wear gloves when doing activities that may cause skin injury (for example when you are gardening, washing dishes, working with tools, or using chemicals such as detergents).
- Use insect repellent to avoid bug bites.
- Use sunscreen to avoid sunburns.
- Be careful using a razor.
- Take good care of skin and nails.
- Instead of cutting your cuticles, push them back to reduce possibility of infection.
- Moisturizing your skin with lotion will help reduce the chances of your skin getting dried and cracked. If scratches or punctures to your skin occur, wash with soap and water and apply a topical antibiotic and watch for signs of infection.
- Take precautions against infection when there are breaks in the skin and seek medical attention early if you see any changes. You should seek medical advice immediately if you have increased redness and warmth in your “at risk” arm, chills or fever that could signal an infection.

I talked about cording earlier, which is also known as axillary web syndrome. Axillary web syndrome is a complication that can happen after a sentinel node or axillary node dissection. Just like the name, cord-like structures appear just below the skin. The area may be sore and tender. Cording may be due to inflammation or damage of lymph vessels and or formation of scar tissue. Cording may resolve on its own, but some people that develop it will require physical therapy and regular stretching for the cording to subside.
Although lymphedema cannot be prevented, there are some ways to help minimize your risk.

- Whenever possible, use an uninvolved or not at risk extremity for blood pressure, blood tests or IV therapies.
- Wear non-constrictive jewelry and clothing.
- Ease into activities; gradually build up the duration and intensity of exercise.
- Take frequent rest periods during activity.
- Limit repetitive motions (rubbing, scrubbing, pulling or pushing).
- Avoid heavy lifting with your at risk arm and carrying a heavy bag over your shoulder.

### Risk Reduction

- When possible, use your non-surgical side for blood pressure tests
- Wear non-constrictive jewelry and clothing
- Ease into activities and take breaks
- Avoid heavy lifting and limit repetitive motions
- Wear supportive, properly fitted bra
- Limit prolonged exposure to topical heat and cold
- Try to maintain a healthy weight by following a well-balanced diet and exercising
Wear a supportive, properly fitted bra with no underwire.

Limit prolonged exposure to topical heat and cold, which may include hot/cold packs, hot tubs, saunas, steam rooms and sweat lodges.

Try to maintain a healthy weight by following a well-balanced diet and exercising. Being overweight can increase your risk of developing lymphedema. If you are having trouble managing your weight, consult your doctor for support or see a dietitian to set up a weight loss program for you. The Breast Health Centre offers this support. Please see the contact information for our dietitian in this presentation.

I am often asked about air travel. There is very little evidence-based research on the risk levels of airplane travel. If you have not yet been diagnosed with lymphedema, the current research reflects that the benefits of wearing a compression sleeve are inconclusive. In other words, it is unlikely to be advantageous to wear a compression sleeve, and equally unlikely to be harmful.

If you have increased risk factors for lymphedema or if you have lymphedema, we do recommend you wear a compression sleeve, and follow the guidelines to wear it before, during and after your flight. It is very important you are fitted properly for your garment. A compression sleeve that is too tight or too loose won’t be helpful.
Signs and Symptoms

- Swelling
- Heaviness
- Tightness (clothes and jewelry)
- Aching or fullness

Signs and symptoms of lymphedema include; swelling or edema on the surgery side. The areas that could be affected are your arm and/or hand, your chest, armpit and trunk. Patients with lymphedema feel heaviness, tightness, aching or fullness in the affected area. Your clothing and/or jewelry will feel tighter. The tightness of your clothing and jewelry may be a sign of increased swelling. Pay attention to these changes, and seek medical advice if you feel any changes.
I am now going to demonstrate some stretching exercises you can do now that you have had your surgery.

It is important to start doing stretches and exercises immediately after surgery to encourage mobility, reduce pain, stiffness and improve your overall well-being. The exercises that are demonstrated in this presentation are gentle and should be done in the first week after surgery. While performing the exercises, make sure that you take deep breaths and the movements are slow and controlled. It is normal to feel a gentle tissue stretch or slight pull of the skin.

The first one that will be performed is shoulder shrugs. Shoulder shrugs can be done sitting or standing. Start with your shoulders in a relaxed position and slowly lift them towards your ears. Hold for 5 to 10 seconds, slowly lower your shoulders and relax. Repeat 5 to 10 times.
Next exercise is shoulder rotations. This one helps to increase circulation in your shoulders and promote good posture. Start by slowly rotating your shoulders upwards, backwards, downwards and then relax in the position you started in. Repeat 5 to 10 times then switch directions, moving your shoulders in the opposite direction. Forward shoulder circles begin with your shoulders moving upwards, forwards, downwards, then relaxing in the position you started with. Repeat 5 to 10 times.
A great way to improve your posture is to do this next activity, by simply squeezing your shoulder blades together. This movement stretches and opens up your chest area. To properly contract your shoulder blades together, keep your shoulders down (in a relaxed position) with your elbows straight/extended and palms facing your sides. You may want to try this in front of a mirror so you can make sure that you have proper position. Contract your scapula together and rotate your palms so they face forward. This motion will naturally bring your shoulders in an external rotation. Hold this movement for 5-10 seconds then relax. Repeat 5-10 times.
Arm lifts can be done sitting or standing. Hold your hands together in front of you with your elbows bent, in a relaxed position to start. Slowly lift your arms upwards until you feel a gentle stretch. If you have any pain or tenderness, lower your arms until you can comfortably perform the exercise. Hold for 1 to 2 seconds and slowly lower your arms until you’re in the starting position. Same as the other exercises, repeat 5 to 10 times.
One of the best things you can buy is a small, soft squishy ball. By squeezing this ball it may help reduce swelling and improve circulation by encouraging the pumping action by the muscles, not to mention act as a stress reliever. If you are sitting or laying down relaxing, squeeze the small ball several times, as easy as that.
In the Early Stages of Healing

- Try not to lift more than 10 lbs (4.5 kg)
- Avoid vigorous, repetitive motions
- Avoid reaching high on your surgery side
- Prop arm with pillows

These exercises should be done within your pain tolerance, and remember to take deep breaths while doing them. In the early stage of healing it is recommended to not lift anything heavier than 10 lbs, avoid activities that require you to perform vigorous, repetitive motions (like vacuuming, shoveling snow) or reaching high on your surgery side. Take it easy and prop your arm with pillows for comfort and to allow yourself to heal.

The next set of exercises demonstrated, encourage full range of motion in your shoulders. It is important to start these stretches as soon as possible after surgery to prevent possible issues with mobility in your shoulder on your surgery side. If you have had a drain inserted, wait until the drain has been removed to begin these stretches.
I’d like to start with wall walking. It is a gentle exercise to increase the mobility in your shoulder.

Stand facing the wall at about an arms length from the wall. With your elbows straight, start from your hips, slowly walking your fingers up the wall as high as you can. Make sure you are not just bending your elbows but that the movement is coming from the shoulders. Walking both hands will help to maintain good posture.

Hold for 5 deep breaths and then take one more deep breath and try to walk your fingers a little further up the wall. Then slowly walk both arms down. Relax and repeat several times. Do not be discouraged if your progress is slow. One finger at a time is progress.
Next we will perform wall walking in a different direction, stretching our arm out to the side (abduction).

Stand sideways with your shoulder facing the wall. Starting from your hip slowly walk your fingers up the wall as high as you can. Remember to try to keep your elbow straight. If you feel pain then slightly lower your arm until the stretch is not painful. Hold for 5 deep breaths, then take one more breath and try to walk your fingers a little further up the wall. Then slowly walk your fingers down again. Relax and repeat several times. If you are having trouble with your mobility, try repeating these exercises 2 to 3 times with several repetitions throughout the day.
The next 3 movements could be done seated or standing, they are similar to the wall walking movements.

a) Start by raising your surgery side arm out to the side as high as possible. Keep your elbow straight. Hold for the count of 10 and then lower slowly. You can repeat this exercise several times. Remember to take deep breaths while performing this stretch.

b) The next movement, is similar to the previous one. You will slowly raise your arm forward as high as possible, keeping your elbow straight. Hold for the count of 10 and then lower slowly. You can repeat this exercise several times.

c) This next movement will provide a stretch in your pectoralis muscles. These muscles are located in your chest area and can feel tight after breast cancer surgery. To do this stretch you should be able to comfortably place both hands behind your neck. Begin with both elbows pointing forwards. Slowly move your elbows out to the sides as far as possible. If you are standing against a wall, try to touch your elbows to the wall behind you. Hold for the count of 10. Return your elbows to pointing forwards and then relax.
The last stretch I’d like to include I call the “back scratch stretch”. This stretch is to help you with the motion of scratching your back, or doing up your bra.

For this stretch, you can use a towel to assist the movement and increase the stretch. To do this stretch you should have fairly good mobility in your shoulders. Start by holding one end of the towel in the hand of the side you want to stretch. Start by holding the towel up in your surgery hand. Grab the bottom end of the towel with your non-surgery hand. Gently pull the arm down your back by pulling on the towel with your hand that is below. The motion should appear as though you are trying to “dry your back”. Take deep breaths while holding the stretch, after holding the stretch for a minimum of 30 seconds, try to increase your range by gently pulling the towel further down your back (slow and controlled).
Change the hand positions and gently pull your arm up your back. If this motion is challenging, you may want to start by placing your hand on your hip and slowly moving it up towards your midback. If you want to use a towel or need to increase the stretch, gently pull on the towel with your hand that is above your head. Repeat this stretch 2-3 times per day as needed.

You should continue the exercises until you have regained full movement in your shoulder. If you are having trouble with mobility on your surgery side, contact your nurse or doctor who may refer you to one of the Breast Health Centre lymphedema therapists or a physiotherapist.
Lymphedema is treated with physical treatments that include: manual lymph drainage and combined decongestive therapy.

The Breast Health Centre accepts referrals from anyone that has upper limb lymphedema as a result of breast cancer, regardless of whether you had your surgery through our Centre or not. All we require is a physician’s referral.

If you are not able to visit the Breast Health Centre, there are private certified lymphedema therapists that will provide this service. Be sure they are reputable and are registered with an appropriate organization to ensure their recertification is up-to-date. If you seek private care, most extended health benefit plans will cover this service, but it is recommended you contact your provider to confirm.
In our program at the Breast Health Centre, you will learn about how to manage lymphedema with simple self drainage techniques, self compression bandaging, skin care and prevention of infection, specific exercises and if applicable weight loss program and social support.

Once your referral has been received, we will see you for an initial assessment and set up a treatment plan that will help you manage your care independently at home. We ask you to return for 3, 6, and 12 month follow-ups before discharging you from our program but are always available for help and advice as needed.

Because we don’t know who will and who won’t get lymphedema, we tell patients to be cautious. Pay attention to the risk factors that I have outlined in this section and seek medical advice if you notice changes to your body.
Instructions for the stretches demonstrated along with our pamphlet ‘Your Guide to Breast Cancer related Lymphedema’ are available online at wrha.mb.ca/bhc in the Client Education and Resource section,
If you would like to find out more information about our lymphedema program you may contact a certified lymphedema therapist at the Breast Health Centre 204-235-3684 or 204-237-2034 or call Toll-free in Manitoba 1-888-501-5219.
WRHA Breast Health Centre
Certified Lymphedema Therapist

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