SINGAPORE GENERAL HOSPITAL, PHYSIOTHERAPY

# Breast Reconstruction using TRAM / DIEP / SIEA flap

#### Information booklet

#### THE OPERATION

#### **WHAT** is Breast Reconstruction?

After your mastectomy, the surgeon might use a portion of skin, fats and sometimes muscle to rebuild your breast.

Types of abdominal flaps:

- 1. **TRAM flap** Surgeon uses the Transverse Rectus Abdominis Muscle (TRAM) with surrounding skin and fat. If the surgeon keeps the muscle's original blood supply, it is a pedicled
  - flap. If the muscle's blood vessels are cut and reconnected to the blood vessels in the chest or armpit the it is a free flap.
- 2. **DIEP/ SIEA flap** Surgeon only uses skin and fat from abdomen to reconstruct the breast. The abdominal muscle remains functional and untouched. The blood vessels are reconnected to those in chest or armpit. The names of these flaps are derived from the blood vessels used.

#### After the operation...

You can start doing the following:

#### **Breathing exercises**



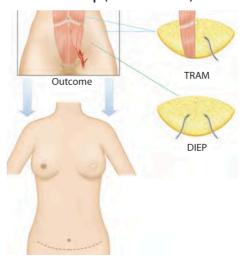
Take deep breaths and hold them for 3-5s each time! Repeat 10x every waking hour.

#### Coughing/ sneezing



Remember to apply pressure to your abdomen wound before coughing or sneezing.

#### Abdomen Flap (DIEP or TRAM)



## THINGS TO REMEMBER!

1

#### **KEEP HIP BENT**

Keep your hip bent at least 30' during sleeping, standing and walking for first 2 weeks after the operation.



## MOVE SHOULDER AS ADVISED

Avoid pushing or pulling with arm on the operated side.

3

#### **AVOID LIFTING**

Only carry things less than 1kg.

(e.g. phone, cup)

#### **Ankle pumps**



Move your ankles often to improve blood circulation in your legs and prevent blood clots.



#### POST-OPERATIVE CARE

#### HOW SHOULD YOU REST IN BED?

While you are in bed, make sure that your hips are bend to create a jack-knife position (Figure 1). You can incline the head of the bed or place pillows under your knees.

Your physiotherapist will be assisting you to get out of bed and to walk on your post-operative Day 2. They will continue to assist you until you are able to mobilise on your own.

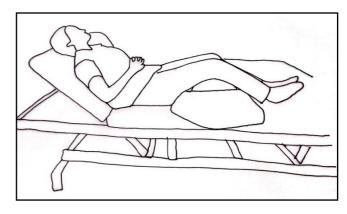


Figure 1. Sleeping position in "V" position

#### HOW DO YOU GET OUT OF BED?

1. Always turn to your non-operated side. Keep a small space between your operated arm and your body (rest your hand over your tummy to achieve this position). Make sure you turn like a log, with your shoulders, hips and knees together.

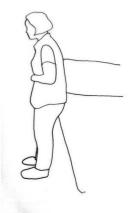


2. Lower your legs then push yourself up to sit with your nonoperated arm.



3. Stand up slowly while keeping your hips bent.

\*If you have had bilateral breast reconstruction, please refer to the video below for steps to get out of bed.



Scan the QR code for a video demonstration of the above steps:

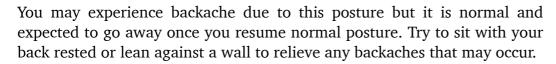






#### **KEEP YOUR HIP BENT**

For the first 2 weeks after your operation, remember to keep your hip bent about 30 degrees or until the point of tightness especially when you stand/ walk. You may use an abdominal binder to provide more wound support when you are standing/ walking.



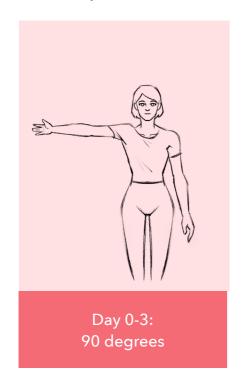




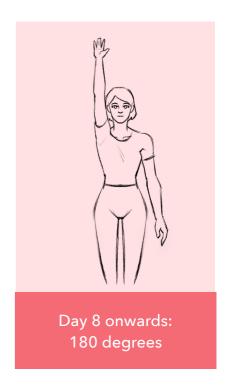
#### HOW MUCH TO MOVE YOUR SHOULDER?

After your operation, keep your arm between 90 degrees from your body unless otherwise advised. This is to ensure you are not pressing or applying tension on your newly built breast.

One week after your operation, you are allowed to slowly move your shoulder to full range as tolerated, you should not feel more than a gentle stretch at all times.







Scan the QR code for a video demonstration of the above steps:



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# 3

#### **HOME EXERCISES**

Even though you are not allowed to lift more than 1kg after your operation for the first 2 weeks, you can and are encouraged to do the following exercises.

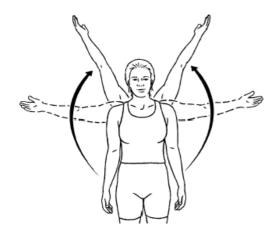


### Assisted shoulder flexion and abduction (Wall climbs)

For flexion: Use your fingers to climb up the wall until point of tightness is reached while facing the wall. Hold for 15 seconds before returning to starting position.

For abduction: Use your fingers to climb up the wall until point of tightness is reached while facing away from the wall (shoulder moving up sideways).

Repeat 10 times per set. Do 1-3 sets per day.



#### Active shoulder abduction

Raise arms sideways as high as you can and slowly lower them down

Repeat 10 times per set. Do 1-3 sets per day.

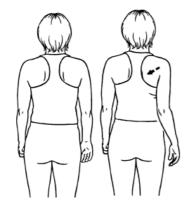


#### Active shoulder flexion

Raise arms forwards as high as you can and slowly lower them down

Repeat 10 times per set. Do 1-3 sets per day.





#### Scapular retraction

Squeeze your shoulder blades together. Hold for 3-5 seconds.

Repeat 10 times per set. Do 1-3 sets per day.

#### Scan the QR code for a video demonstration of the above steps:

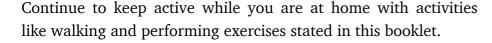




#### WHAT HAPPENS AFTER YOU GO HOME?

A physiotherapy appointment will be arranged within 1-2 weeks after you leave the hospital. You can bring up any queries you have during your appointment.

You will also be taught ways to improve your range and strength during your outpatient physiotherapy follow up.





## HOW LONG DO YOU NEED TO FOLLOW THESE RESTRICTIONS?

We understand that these restrictions after your operation may be overwhelming and troublesome. However, these restrictions will be slowly lifted 1-2 weeks after your operation date.

You will then be gradually allowed to go back to your normal daily activities. Physiotherapy follow up may span across 3 - 6 months.



Compliance to these restrictions and advice will help to minimise risk of wound complications and optimise healing after your operation.

Information correct as of September, 2021. Company reg no. 198703907Z

<sup>\*</sup>If you are in doubt or need specific treatment/exercises, please check with your physiotherapist/medical team who will advise accordingly.