

Royal North Shore Hospital

Orthotics Department
Occupational Therapy Department
Physiotherapy Department
Acute Care



Anterior/ Posterior TLSO: Guidelines

Patient and Carer Information Booklet

If you have any further questions regarding the content of this booklet please contact your:

Orthotist: Phone 02 9463 2303
Occupational Therapist: Phone 02 9462 9666
Physiotherapist: Phone 02 9462 9747



Health
Northern Sydney
Local Health District

Anterior/Posterior TLSO (Thoraco-Lumbo-Sacral Orthosis) Spinal Brace

Purpose of the TLSO brace:

TLSO brace is prescribed to wear after spinal injury or surgery.

The brace does three things:

1. Immobilises your spine during healing
2. Stabilises and restricts movement in injured areas
3. Controls pain by restricting movement

You need to wear the brace for as long as your consultant has instructed

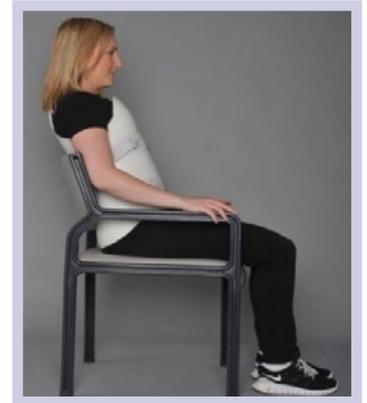
Precautions:

While wearing a TLSO brace you are required to adhere to a number of precautions detailed below:

- No twisting or bending of your back
- Sit in a firm, high chair with suitable back support
- Do not sit for longer than 30-40 minutes
- Do not lift objects that weigh greater than 2kgs or 4 pounds (e.g. 2L of milk)
- Avoid pushing and pulling (e.g. pushing a shopping trolley)

Sleeping:

- Brace is not required for lying in bed. It is only required for sitting, standing and walking
- You should sleep on your back for the duration of brace use
- If you need to move around in bed you should log roll



Putting Brace On and Off in lying:

Your Physiotherapist and Orthotist will explain, demonstrate and practice application of the TLSO while you are in hospital. **You will require assistance to take the brace on and off in lying**

To apply the brace:

1. Log roll onto your side
2. Assistant places on back section

Note: Assistant must take care to use a scooping action and press down on the bed, ensuring the brace is even. This will limit rotation/twisting. It is important to avoid twisting your back when putting the brace on and off

Once in place, log roll to return to lying on your back.

3. Apply the front section of the Anterior/Posterior TLSO, taking care to tuck the front **inside** the back
4. Fasten Velcro straps, starting with the centre straps. Tighten straps evenly side to side and as firm as tolerated

To remove the brace:

1. Start by lying on your back
2. Undo all the Velcro straps. Fold the Velcro back on itself (to prepare it for future use).
Remove front section of TLSO
3. Log roll onto your side
4. Your helper then removes the back section
5. Log roll to return to lying on your back

It is important to avoid twisting or bending your back and neck when putting the TLSO on and taking it off

Log rolling:

Your Physiotherapist will explain, demonstrate and practice the correct technique to log roll with the brace on while you are in hospital

To get out of bed when brace on:

- Bend outside knee
- Bring arms toward the edge of the bed
- Keep your hip and shoulders in line as you roll onto your side.
- Drop your legs off the bed
- With your arms, push up to sitting position

Remember to keep your spine and neck straight and do not twist your body as you roll

To get into bed, reverse this process:

- Sit on the bed, with your bottom as far back as possible.
- Lean to the side and lower your trunk to the bed
- Lift both legs off the floor onto the bed
- Roll over onto your back with both knees bent

Remember to keep your spine and neck straight and do not twist your body as you roll



Pressure Injury Prevention:

A **pressure injury** is an injury to the skin caused by unrelieved pressure and may occur when you are unable to move due to injury or surgery. They may develop under or around braces or from being in the same position for too long.

Signs of a pressure injury:

- Redness / skin discoloration
- Tenderness, pain, or itching in affected areas
- Blistering
- Broken skin

Reducing the risk of pressure injury:

- Ensure you or another person inspects your skin daily for red areas. It is easiest to do this straight after the brace is removed when lying in bed
- Do not wear the Anterior/Posterior TLSO if it is wet
- Bathing frequently
- Change the t-shirt worn under the brace
- Keep your skin dry

If the areas of redness do not go away and you have increasing discomfort please notify your Orthotist on (02) 9463 2303 to have your brace reviewed.

Showering:

Your TLSO brace is waterproof:

- Shower with your brace on. Remove brace after showering, dry and then reapply. It is best to shower just before going to bed to allow the brace to dry overnight.

OR

- Remove the brace and have someone sponge bathe you while you lay flat in bed with the brace off

NB: It is important you do not bend or twist your back while the TLSO brace is removed.

DO NOT bathe in a bath tub.

Your Occupational Therapist will assist in recommending appropriate assistive equipment for you.



Shower chair



Shower stool

Toileting:

The brace should remain on while toileting. Bend at your hips and knees to sit on the toilet. Men may find it easier to use urinal bottles.

If you are finding it difficult to wipe your bottom, you may find an extended handle bottom wiper helpful. Your Occupational Therapist can advise on techniques and equipment that can make toileting easier.



Over toilet aid



Urinal bottle



Bottom wiper

Images courtesy of Independent Living Specialists

Dressing:

You are required to wear a well fitted cotton t-shirt under the brace. Application of clothing will become difficult as you will not be able to bend. Your Occupational Therapist can advise you on techniques to make dressing easier.

- Wear clothes with elastic (i.e. tracksuit pants)
- Ensure that pants are worn over the base of the brace
- If you wish, wear loose tops over the brace. Shirts with buttons are easier to apply
- Long handled reaching aid can help pull up pants and underpants
- Long handled shoe horn will assist with application of shoes
- Shoes without laces or elasticised laces will be easier to apply and remove



**Long handled
reacher**



**Long handled
shoe horn**

Images courtesy of Independent Living Specialists

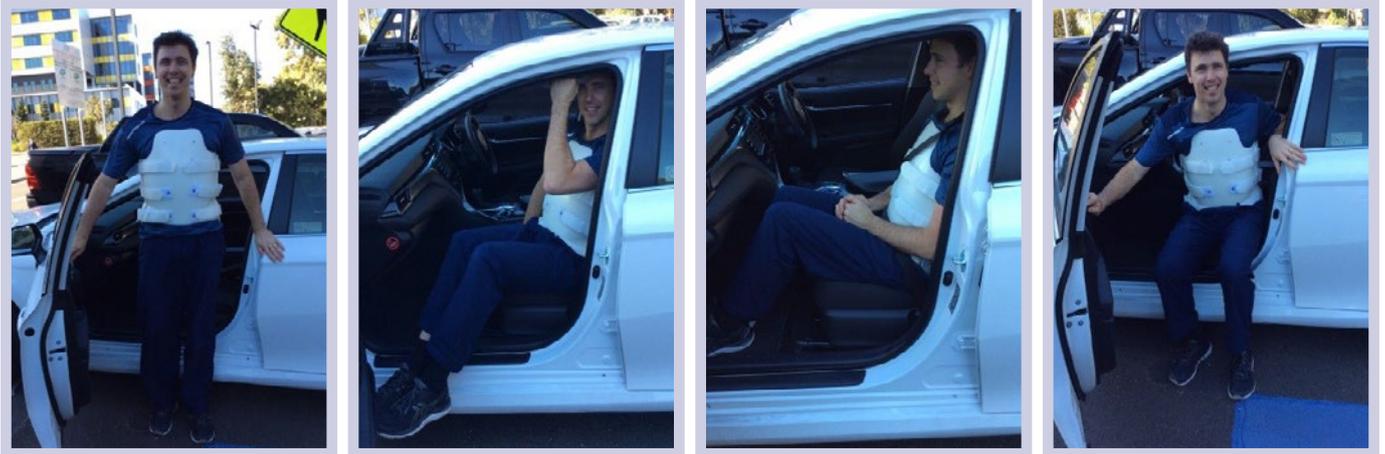
Transport/Driving:

You are not allowed to drive for the duration of brace.

How to get into the car:

- Ensure the seat is pushed back and reclined
- Bend at your hips and knees, lower your bottom onto the seat
- Swing your legs into the car
- Plan regular breaks if you are travelling for more than 30 minutes

NB: If you have queries with regards to returning to driving, please refer to the Austroads Fitness to Drive guidelines or ask your Occupational Therapist or Consultant



Lifting:

Discuss your maximum lifting tolerance with your consultant

Avoid lifting items more than 2kgs. Have assistance with 'heavier' tasks such as:

- Shopping
- Carrying pots and pans and other kitchen appliances
- Vacuuming, mopping
- Laundry
- Gardening
- Child care - do not lift children

Tip: Break up groceries or laundry into smaller loads by taking more frequent trips



2L Milk = 2kg

Work:

- Plan your return carefully: look at your job requirements and ask if there are lighter duties
- Maintain all driving and lifting restrictions
- Set up your work place area to allow good posture and comfort
- Take regular breaks
- Talk to your Occupational Therapist for further discussion on returning to work

Sex:

Ask your consultant when you can return to sexual activity. Avoid postures that put strain on your neck and back. You may need to assume a more passive role for a time. If you have concerns or have increasing pain, ask your consultant.

Exercise:

The best exercise during your recovery is walking. Increase your distance daily, guided by your level of fatigue and your physiotherapist.

Brace adjustments:

Adjustments are made by the Orthotists. Do not make any adjustments yourself.

Further Questions:

If you have any further questions, please ask your Orthotist, Occupational Therapist or Physiotherapist and refer to the video.

You can contact an Interpreter using the Translations Interpreter Service – TIS (free call) on 131 450

Checklist of Education / Training Prior to Discharge

- I understand my movement precautions
- My carer and I both feel confident with applying and removing the brace in the correct manner
- I understand how to check for and prevent pressure areas
- I am able to get in and out of bed independently
- I understand how to shower, toilet and dress whilst wearing my brace

Thank you to all participants who have allowed the use of their images in the production of this booklet

