

Hoisting and Positioning in Wheelchair

A Guideline for Clients and Carers

The following principles apply when using either a ceiling, floor or standing hoist for a patient transfer.

As with other manual handling tasks, it is important to adequately plan the hoist transfer and setup the environment before commencing. This will ensure safety for the client and carers. Often as part of organisational risk management, a therapist will complete an initial assessment to provide manual handling recommendations for each client, so check the relevant documentation first.

Safety considerations for planning include:

1. Adequate number of carers to complete the transfer
2. Appropriate hoist (safe working load is adequate for the client; consideration of manual vs electric pivot yokes; charged battery)
3. Appropriate hoist sling (compatible with the hoist, suitably fit for client size; accommodates any other needs eg, skin care)
4. Suitable circulation space for the hoist and carers, with any potential hazards removed (eg. objects, liquid spills, electrical cords etc)
5. Client equipment (bed, wheelchair, commode) prepared and secured with brakes on, positioned to minimise the manoeuvring of the hoist with patient
6. Clear communication between staff and client before, during and after the hoist transfer

Be aware that most powerchairs have a lever that disengages the electric motors and enables the powerchair to be manually freewheeled into the desired parking position (coloured lever near the rear base of the powerchair which can be operated by hand or foot); alternatively the lever can be switched to engage the electric motors so the powerchair can be driven via the controller- select a slow indoor speed to do this safely.



Step 1: Hoist transfer into wheelchair

It is usually recommended that someone with a Spinal Cord Injury uses a suitable pressure relieving cushion and backrest.

Before hoisting, consider the following

Equipment Check:

- Cushion is correctly orientated on the wheelchair
- Position the power wheelchair in about 30 degrees rear tilt as this will assist with optimal positioning of the pelvis
- Apply the brakes or re-engage the power wheelchair motor and turn the chair off
- Consider if the joystick/chin control boom needs to be repositioned out of the way for clear hoist access
- Swing away or flip up footplates may need to be moved to improve hoist access
- Castors may need to be turned under the front fork by pushing/driving the wheelchair forward slightly to improve hoist access
- Headrests may need to be removed for hoist access. Those with poor neck control will need to have the headrest refitted prior to removing the hoist sling. Headrests should always be returned to the original height and shouldn't need adjusting after hoisting; rather if the headrest is comfortable for the patient it is a good indication they have been positioned well in the wheelchair.
- Armrests are often best left in place as this provides a guide for carers centring the client, plus added sitting balance support for the client. However, if hoisting access is tight, one armrest may need to be removed/swung out of the way prior to the transfer.

Hoisting

Hoisting entry and exit from the wheelchair is normally in front of the wheelchair and NOT from the side.

Position the hoist sling symmetrically around the client and ensure the sling is low enough to cradle their pelvis.

Once hoisting is underway and the client is fully hanging in the sling, adjust the hoist yoke angle so the patient is positioned upright.

When landing the client in the wheelchair, the front carer pushes the knees back while lowering the hoist. If relevant, a second carer will work from behind. The aim is to land the client as far back and

BACK



BACK



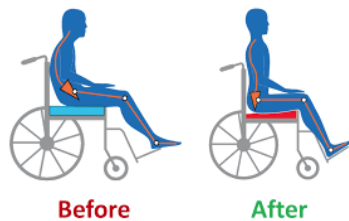
FRONT



centred as possible. Once landed, the sling is detached and removed by carefully peeling the hoist sling from under the thighs, then fully remove by leaning the client forward. Clothing is then adjusted.

Step 2: Check they are positioned as far back in the wheelchair as possible

While the client is leaning forward for removal of the hoist sling and adjustment of their clothing, check if there is any space between the patient's bottom and the backrest. There should be no gap present, to ensure that their pelvis is supported to sit upright rather than slumping backwards posterior tilt.



If there is a small gap, it may be possible to reposition further back on the cushion; keep the client's chair in rear tilt and consider if it is necessary to also keep them leaning forward to offload their weight from their pelvis; use a carer to push on their knees until the gap is closed.

Some clients may not be able to be repositioned in this way and so rehoisting may be necessary.



Step 3: Check they are centred in the chair

With the client's consent, place your hands on either side of the hips and check if the distance between their hip and the edge of the wheelchair or armrests is the same on both sides. If they are not centrally positioned, consider re-hoisting to attain a more central position.



Step 4: Check if the pelvis level? If not, correct it.

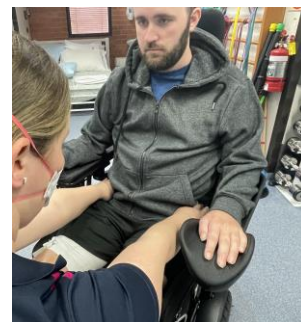
With the client's consent, palpate the ASIS bony landmarks on their pelvis (anterior superior iliac spines) – see picture

Feel to see if they are;

- 1) Level; is one higher than the other?
- 2) Rotated; is one further forward than the other?

If they are level and not rotated then the pelvis is well positioned and you can move on to look at their trunk position (step 5)

If they are not level or rotated review steps 4a and 4b.



Step 4a: Correcting pelvic position (Obliquity – not level)

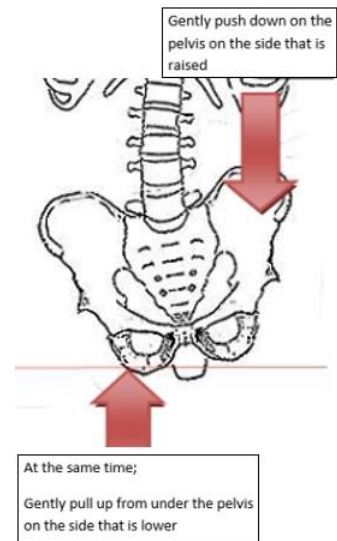
If the pelvis is not level, one side is higher than the other this is called a pelvic obliquity

You may be able to correct this position by completing these two steps at the same time;

- 1) Place one hand on the side of the pelvis that is highest and gently push down
- 2) Place the other hand under the pelvis on the side that is lowest and gently lift up

When doing this go slowly and gently as you will be surprised how little effort is required to correct the level of the pelvis

TIP: if after adjustment you are still unable to get the pelvis level check for equipment failure such as flat tyre or cushion on one side

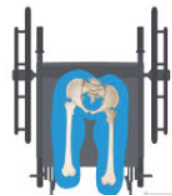


Step 4b: Correcting pelvic position (Rotation – one side further forward)

If the pelvis is rotated – one ASIS is further forward than the other, you may also see that one leg is positioned further forward.

To correct a rotated pelvis you can;

- 1) gently push back on the knee of the side that is further forward
- 2) or lean forward and pull their pelvis further back on the side that is positioned forwards
- 3) or if you have two people available you can do both of these options at the same time



Step 5: Check that the trunk and head is centred and the shoulders level

You will need to place your hands on either side of the trunk and feel that they are straight and in the centre of the backrest.

If they are not centred this should be easily corrected by gently repositioning their trunk.

If not; check their pelvis is level again

This is the same for checking that the head position is centred and the shoulders are level

