

“When Standing in a Frame is a Pain!” :

Achieving a more Comfortable Standing Position

Standing upright in a standing frame can cause a few aches and pains initially, especially in parts of the body that haven't been stretched for a while such as the muscles of the back, hip and knees. Clinical experience tells us that these 'stretch' pains are usually short-lived (one to two weeks), are usually only present during the stand and generally disappear within an hour or so after the person sits down.

In a small number of cases, however, the standing position or prolonged pain caused by standing can be so uncomfortable that people no longer want to use the frame. There are a number of reasons for pain and it should be taken seriously by the treating physiotherapist. Here are a few suggestions as to the cause of the pain and what you can do about it:

Problem	How it presents	What to do
1. Stretching tight muscles and other soft tissues	Muscles and soft tissues that haven't been moved for a while may cause pain or aching especially in the back, hips or knees. This often comes on with standing but should disappear shortly after sitting down and ease after a couple of weeks.	<ul style="list-style-type: none"> • Build standing time up slowly over a number of weeks. • Make sure the knee strap isn't pressing on the knee-caps – it should be just below. • Gently move the body forwards and backwards or side to side in the frame to ease the tight muscles. • Relaxing the knees so that they are slightly bent in standing may help. • Try padding the knee strap with a folded towel if the knees are sore. • Try changing the posture in standing (see below). • Off-the-shelf painkillers may help.
2. Arthritis	Stiff joints that haven't been moved for a while may cause pain when held for periods in a new position or with weight-bearing.	<ul style="list-style-type: none"> • Movement in the frame may help to ease arthritic pain such as leaning forwards and

	This type of pain usually presents as an ache and should disappear shortly after sitting down.	backwards, side to side or twisting the trunk. <ul style="list-style-type: none"> • Try moving your weight from one leg to the other in standing. • Off-the-shelf painkillers or anti-inflammatories may help.
3. Fracture	<u>This is very rare</u> , however if severe pain comes on quickly and does not clear with sitting, seek medical assistance immediately in case of osteoporotic fracture.	<ul style="list-style-type: none"> • Seek medical advice. • Stop using the frame until the pain has been investigated. • Inform your physiotherapist and the Research Team as soon as possible.

“Getting the Posture Right” – some helpful tips to pain-free standing

Getting the posture right is important. If the position of the pelvis, hips, knees and feet are slightly out of line in standing, this can lead to uncomfortable aches and pains. Try the following if you are finding that standing is uncomfortable.

Foot position

Getting the feet in a good position often leads to a better posture in standing. Always make sure the feet are well placed before standing in the frame. They should be facing forwards, with the toes pointing very slightly outwards, and should be approximately hip-width apart. It is very important to make sure that the ankles are directly under the hips. Don't push the feet up to the bar on the base on the frame if this takes the feet too far forwards. If the feet have a tendency to move out of position as you stand, use firm, rolled up towels or small blocks of wood to keep them in position.

Knee position

Some knee joints have a tendency to fall backwards when people stand. This is very common in people with MS who have weak hamstring muscles. This 'bowing' of the knees (Figure 1) can force the hips to become more bent which, in turn, makes the back more 'rounded'. This posture can quickly lead to pain in the knees, hips and back.

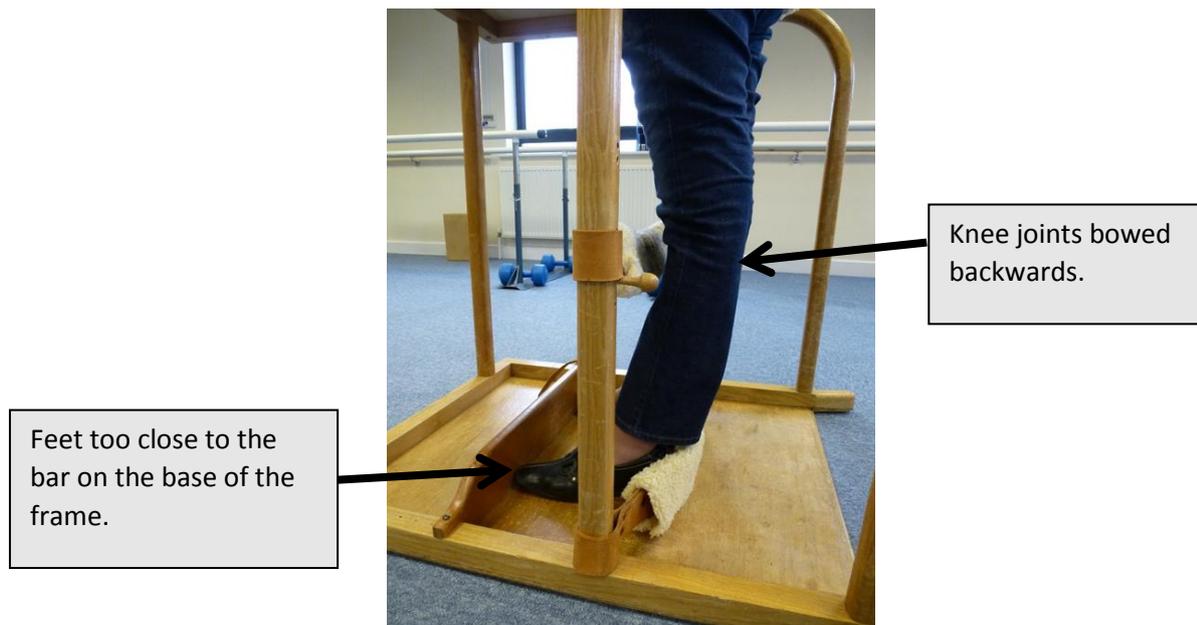


Figure 1

Potential Solutions!

This bowing of the knees may be happening because the feet are too far forwards. If so, sit the person down again and place the feet further back so that the ankles are directly under the hips.

Another way to keep the knees in a better position is to move the ankle strap around the back of the calves (Figure 2). This will help to keep the knees in a neutral or very slightly bent position and may also help to correct the posture of the hips and the trunk.

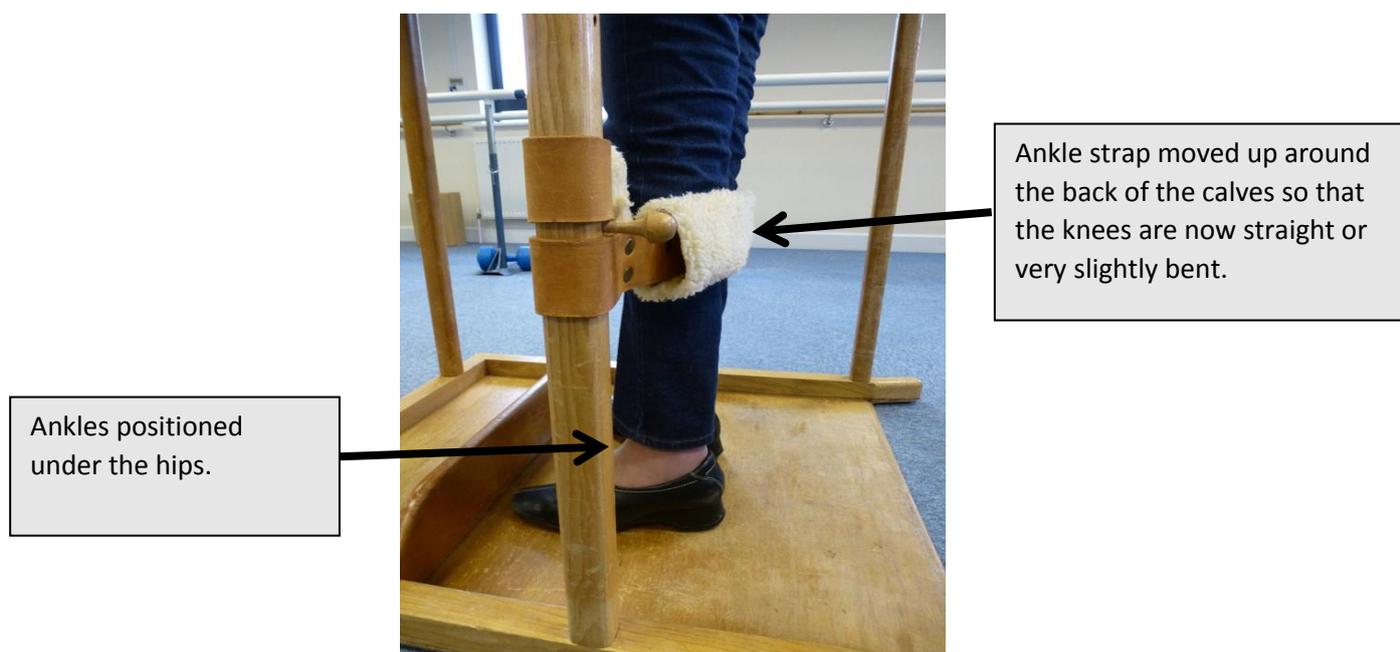
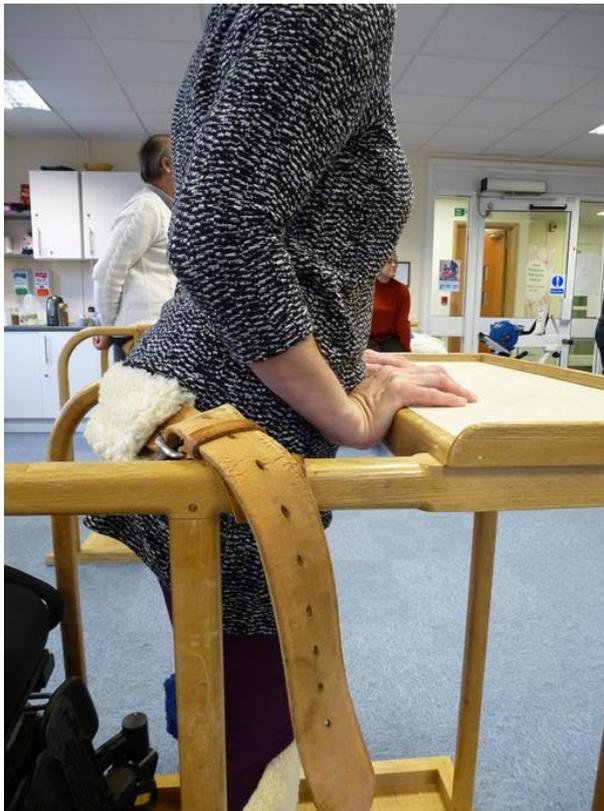


Figure 2

Hip and pelvis position

The hips and pelvis also need to be in a good position to allow standing to be comfortable. Just as with the knees, if the hips are not in a neutral position this can lead to extra strain on soft tissues and muscles which can lead to pain. If the hip strap is too high, this can cause the bottom to stick out and the back will then overarch. This could lead to back ache and perhaps even neck ache. Conversely, if the hip strap is too low the person will 'sit' on the strap which can cause their back to slump. Again, this can lead to back and neck ache.



Strap too high causing the bottom to stick out and over-arching of the back.

Figure 3

Potential Solutions!

Make sure the hip strap goes across the middle of the buttocks so that the pelvis is not tilting forwards or backwards but is held in a 'neutral' position.

Sometimes the pelvis has a tendency to fall forwards which makes the back overarch (Figure 3). A piece of foam or a folded towel placed between the person's tummy and the table may help to hold their pelvis in a better position (Figure 4 and 5) especially if the tummy keeps falling forwards against the table (Figure 3).



Tighten the hip strap across the middle of the buttocks so that the pelvis is not tilting forwards or backwards but is in “neutral”.

Figure 4



Figure 5

Hopefully, some small adjustments to the position of the feet, knees and pelvis will allow the body to get into a better standing position and relieve the pain.