Bwrdd Iechyd Prifysgol Aneurin Bevan University Health Board

Information for patients

Continuous Passive Motion (CPM)

Physiotherapy Service





What is CPM?

A continuous passive motion (CPM) machine is used to move your joint through a pre-set range of movement (ROM). It is used to help reduce joint stiffness and increase your available ROM.

Following manipulation of your joint, the CPM machine may be used help to maintain the new ROM until you are able to maintain it yourself with exercises.

How does it work?

The CPM will be set up by a physiotherapist. For the knee this will be set up in lying. Elbow CPM may be set up either in lying, or sat in a chair.

The Physiotherapist will check your available range of movement prior to starting the machine. They may do this by moving your joint through its range or by consulting your operation note if you have had a manipulation.

Your affected limb will then be placed into the cradle and the range of movement will be set accordingly.

Once started, the machine will continue to bend and straighten your joint within the programmed limits. At the end of each bend, the machine may pause for a few seconds (the length of time is set by your physiotherapist) allowing the tissues to stretch.

You may experience some discomfort whilst using the CPM. This is often described as "Burning or Pulling". This should settle after the CPM has done a few cycles.

You will be reviewed regularly when using the CPM machine and the movement limits will be adjusted as required, aiming to increase your available range of movement.

You will be shown how to "Stop" the machine in case of an increase in pain or any other problems. You can press your Call bell to ask for assistance at any time.

If you feel confident to do so, you may be shown how to adjust the movements limits yourself.

How long will I have to use the machine?

This can vary depending on your needs, but to gain the most benefit you may initially need to remain on the machine for several hours at a time. The CPM machine may also be used at night if indicated or requested by your consultant.

When not using the CPM machine, it is important that you do exercises regularly to maintain the movement. You will be taught suitable exercises by your physiotherapist.

CPM will be continued until you have achieved adequate movement in your joint and are able to maintain it with exercises.

Important Points

1. Adequate Pain control is essential when using CPM. The CPM is designed to stretch the tissues around the joint and so may cause some discomfort; this should only be a mild discomfort. **If you experience severe pain or changes in sensation, please stop the machine and inform a member of the ward staff IMMEDIATELY.**

2. Only adjust the settings if instructed to do so by your physiotherapist.

3. CPM covers are designed so that they do not cause friction, **DO NOT pad out the covers with any abrasive materials** as this may lead to rubbing.

4. **If you become aware of any skin abrasions, redness or painful areas please stop the machine and inform the ward staff IMMEDIATELY.**

5. **DO NOT attempt to move the machine yourself.**

6. The CPM provides a passive movement of your joint. Try not to resist this movement, as best results are achieved if you are relaxed.

7. Between sessions on the CPM, you will be taught exercises to help maximise the benefit of using the CPM. It is important to do this as directed by your physiotherapist.