

What are the recommended pressure levels and treatment times for IPC pumps?

Unfortunately, there is no agreement or consensus for the pressure level in IPC for the treatment of lymphedema.

From the literature review, it can be concluded that the pressure level should be adjusted to suit the patient's level of tolerance and response to treatment, however, 40mmHg seems to be a common point.

There is also no standard consensus on the frequency of IPC treatments, this very much depends on the individual situation, and typical treatment duration of between 30 minutes and two hours (one hour twice a day) is generally recommended. One session in the morning, one session in the evening seems to be the norm for self-management.

Careful guidance by a practitioner with knowledge in lymphedema treatment is mandatory to determine optimal treatment frequency. We have not heard of any issue developing from OVER compression.

According to the National Lymphoedema Framework, patients being considered for IPC therapy must be evaluated by a Physician or Healthcare provider with expertise in Lymphoedema.

The Framework also suggests a prescription must include the intensity of the pressure and the pattern of the pressure needed.

Summary recommendations

Suggested pressure setting	Source
30 – 60 mmHg	Position statement of the National Lymphoedema Network, updated February 2011
25 – 50 mmHg	Mayorovitz, HN: Interface pressure produced by two different types of Lymphoedema therapy devices. Phys. Ther. 87 (2007), 1379-1388
50 mmHg	Szoloky, G, B Lakatos, T Keskeny, et al: Intermittent pneumatic compression acts synergistically with MLD in complex DCT for breast cancer treatment related Lymphoedema.
30 – 60 mmHg 20 – 30 mmHg (palliative care) 30 minutes to two hours daily	Lymphoedema Framework. International consensus – Best practice for the management of Lymphoedema.

40 – 50 mmHg
Daily one hour

Queensland Health: Lymphoedema clinical practice guideline 2014

Explanation of the different Modes – Sequential, Wave & LymphAssist

This section describes the differences between the three treatment profiles delivered by the Hydroven 12:

Sequential Mode

Intended use:	Wound care, chronic venous insufficiency and oedema
Treatment direction:	Distal to Proximal (bottom to top)
Pressure range:	15 – 120mmHg
Inflation time:	30 – 95 seconds. This is the time it takes to inflate <u>ALL 12</u> chambers during a single cycle.
Deflation time:	10 – 95 seconds. This is the RESTING period between consecutive cycles.

Wave Mode

Intended use:	Wound care, chronic venous insufficiency and oedema
Treatment direction:	Distal to Proximal (bottom to top)
Pressure range:	15 – 100mmHg
Inflation time:	60 – 95 seconds. This is the time it takes to inflate <u>ALL 12</u> chambers during a single cycle.
Deflation time:	15 - 95 seconds. This is the RESTING period between consecutive cycles.

LymphAssist Mode

Intended use:	Lymphatic management
Treatment direction:	After the initial peristaltic pulses which are applied in a distal to proximal direction, the system reverses direction and operates in a proximal to distal direction (top to bottom).
Pressure range:	15 – 40mmHg*

Inflation time:	60 – 95 seconds. This is the time it takes to inflate <u>ALL 12</u> chambers during the initial peristaltic phase.
Deflation time:	15 - 60 seconds. This is the RESTING period between consecutive cycles.

LymphAssist delivers a sequence of pulses (peristaltic) intended to soften the tissue of the affected limb. It is delivered in a distal to proximal direction.

The mode then reverses direction and delivers FIVE LymphAssist pulses through each chamber in a proximal to distal direction which replicates manual lymph drainage (MLD), this effectively clears a pathway for the accumulated fluid.

It takes approximately **15 minutes** to deliver ONE cycle of LymphAssist treatment

If you set the treatment time to 25 minutes, the system will continue beyond this until it has completed TWO full cycles – this will take approximately 30 minutes and then stop.

The LymphAssist pressure is lower than the two previous profiles because we are trying to apply a gentle pressure to clear a pathway and stimulate the lymphatic channels “back to life”.

Having moved fluid away from affected areas, it finds its way back into the blood stream and exits the body through normal channels.

*This relatively low pressure is sufficient to transfer the accumulation of fluid through the lymphatic channels. It does not require an aggressive pressure (100mmHg), that would cause the lymph collectors to collapse rendering them ineffective.

Typically patients would have two cycles in the morning and two cycles in the evening to maintain status.

See www.LymphAssist.com for detailed explanation of the treatment modes.

