

Photobiomodulation for lymphoedema

Patient Information



What is this?

Photobiomodulation (PBM) is the application of near infra-red LED light to tissues to reduce inflammation and fibrosis and improve the symptoms of lymphoedema. It is also known as low level light therapy (LLLT). It is used alongside other treatments and is not a stand-alone treatment. We use the THOR Photobiomodulation Unit and Cluster probe.

How does it work?

Every cell in your body has thousands of mitochondria, which are responsible for producing energy using oxygen and pyruvate. In stressed cells, mitochondria create nitric oxide, which displaces oxygen and leads to oxidative stress (free radicals) and less energy production. Light therapy helps cells produce more energy and use oxygen better, which aids in cell repair. It reduces free radicals and increases energy, helping with inflammation, scar tissue, skin thickening, and improving lymph flow.

What is the evidence?

Studies show that light therapy (PBM) helps reduce inflammation, swelling, pain, scarring, and skin tightness. There's less research on its use for lymphoedema, but it's still commonly used and has shown positive results.

Is it safe for everyone?

- There are no major risks, but if you're pregnant, let your therapist know so they can avoid treating your abdomen.
- It is safe for people with photosensitive epilepsy, as the light used doesn't trigger seizures.

Are there any risks or side effects?

- There are no known serious side effects.
- Occasionally, a mild rash may appear but will go away quickly.
- Some people may notice a metallic taste after treatment on the head and neck.
- There's no risk of being over-treated with PBM.
- You do not need to wear protective glasses during the treatment.

What does treatment involve?

The treatment time depends on how large the area of swelling is. Your therapist will place the device on your skin for 1 minute, moving it around the affected area and nearby lymph nodes. Treatment typically lasts between 5-15 minutes. How often you have it will be decided individually.

What will it feel like?

PBM therapy is painless, and most people do not feel anything. You may have a slight warmth or tingling sensation.

How long does it take to work?

The full benefits are usually felt 3 months after starting treatment. Some people notice improvements right after the first session. Most people report gradual improvements over 1-6 weeks, which should continue.

Can I do it myself?

Yes, you can buy a PBM machine if you would like to continue your treatment at home.

Contact us

If you have any questions please contact:

Lymphoedema Clinic

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