

The geko™ device. When to use it, how to fit it, what to look for!

The geko is intended for:

- Edema reduction.
- Increasing local blood circulation.
- Immediate post-surgical stimulation of the calf muscles to prevent venous thrombosis.
- Stimulation of the calf muscles to prevent venous thrombosis in non-surgical patients at risk for venous thromboembolism.

The geko device – Providing increased blood circulation for the reduction of swelling in your leg while you are in hospital and at home

Contraindications

- Powered muscle stimulators should not be used on patients with cardiac demand pacemakers.
- Powered muscle stimulators should not be used on patients with recently diagnosed DVT.

Why have I been given this leaflet?

You have been given this leaflet as it contains information about why you are being prescribed the geko device to help to manage your swelling. Please ask your healthcare professional to explain anything you do not understand.

What causes swelling in the leg?

The medical term for swelling is edema. Edema is a normal response of the body to injury, surgery or inflammation. Edema occurs when small blood vessels become leaky and release fluid into nearby tissues. The fluid accumulates, causing the tissue to swell and the swelling can take time to be reabsorbed into the veins and lymph system. Mild swelling is common and usually harmless but excess fluids can delay time to surgery and impede post-operative recovery, including rehabilitation and wound healing.

How does the geko device work?

Worn at the knee, the geko device delivers painless electrical impulses to the common peroneal nerve to activate the muscle pumps of the lower leg that return blood towards the heart.

The geko device emulates the process normally achieved by walking (equal to 60%) without the patient having to move or exert energy and without uncomfortable muscle movements.

Powered by a wrist-watch size battery with software controlled by two buttons, the self-adhesive geko device shapes itself easily and comfortably to the leg.



There are two LED lights indicating when the device is switched on and which of eleven possible stimulation levels has been set.

On the underside of the strap, covered by a water-based conductive hydrogel for secure adhesion, electrodes deliver painless neuromuscular electro-stimulation to the common peroneal nerve.

How does the geko device reduce swelling?

When you are in the hospital and at home you will not be using your leg muscles as you would normally since you are just starting your recovery process.

As you recover, continued use of the device will not interfere with normal movement of the limb or walking.

By stimulating the nerve at the side of your knee activating the calf and foot muscle pumps geko reduces the swelling by moving the fluid through your system that has accumulated after surgery.

When will the geko device be fitted?

The device will be fitted to your operated leg. The device could be fitted before your surgery providing it is not going to interfere with your surgery. In the case of a knee replacement the device will be put on your operated leg right after the procedure in the operating room or in the recovery area. In general, the sooner the device is placed on the operated leg, the faster it can assist in reducing the swelling that is created after the procedure.

What can I expect to feel?

The geko device is very simple to fit. Once it is applied, it will feel like an adhesive bandage has been applied to your skin. When the geko device is switched on you will see green flashing LED lights indicating that the device is active and which stimulation level has been set to get a foot twitch. On the underside of the strap, covered by a water-based conductive hydrogel for secure adhesion, negative and positive electrodes deliver painless neuromuscular electro-stimulation to the common peroneal nerve. The correct stimulation level will be initially set by your healthcare professional. Once the correct level is selected, you will notice an automatic outward movement of your foot every second, which will become less noticeable after a few minutes.

Your awareness of the muscle contractions should gradually lessen as you wear the device. You should be able to sleep with the device switched on. If you find that it still bothers you while sleeping you can decrease the intensity by pressing the ⊖ button. Make sure you increase the level when you wake up in the morning by pressing the ⊕ button.

Post surgery signs to look out for. Please tell your nurse if you notice any of the following:

- Pain, throbbing or tightness in your calf area.
- Swelling or redness in your legs.
- Shortness of breath.
- Coughing, chest pain or discomfort.
- Do not get the geko device wet. Remove when taking a bath or shower, and then reapply when the area is dry.
- Allergic reactions. This product is latex free.

How long do I have to wear geko device for?

- For VTE prevention after surgery, the device should be worn on both legs right after the procedure based on your surgeon's recommendation. The short strap of the device may be placed on top of a dressing after knee surgery.
- For VTE prevention, the device should be worn as long as your risk of VTE is present as determined by your physician.
- For edema reduction, device can be placed on the operated leg right after the procedure for 4-10 days. Device should be worn a minimum of 6 hours a day, but it is recommended up to 24 hours a day as recommended by your surgeon.
- If device is being used pre-operatively or as a result of an injury, the device should be placed on patient at the time of patient visit and be worn a minimum of 6 hours but it is recommended up to 24 hours a day based on clinical studies or as recommended by your surgeon.
- You might wear it less depending on the following factors:
 - If you need to bathe or shower, remove the device and re-apply afterwards, once the leg is dry.
 - If device disrupts your sleep, you can reduce the setting until comfortable. If the device still bothers you, then remove the device and replace in the morning when you wake up.
- Consult your physician if you have any questions.



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Please see the full list of warnings. Please read carefully.



1 Location: The marker line ►►●◄◄ on the geko™ device should line up with the fibula head. Fit to one or both legs as instructed by your physician and replace the device every 24 hours. See full instructions for use.



2 Cleaning: Wash and dry the skin where the device will be fitted.



3 Fitting: Remove the film from the geko™ device and place the marker line ►►●◄◄ over the fibula head.



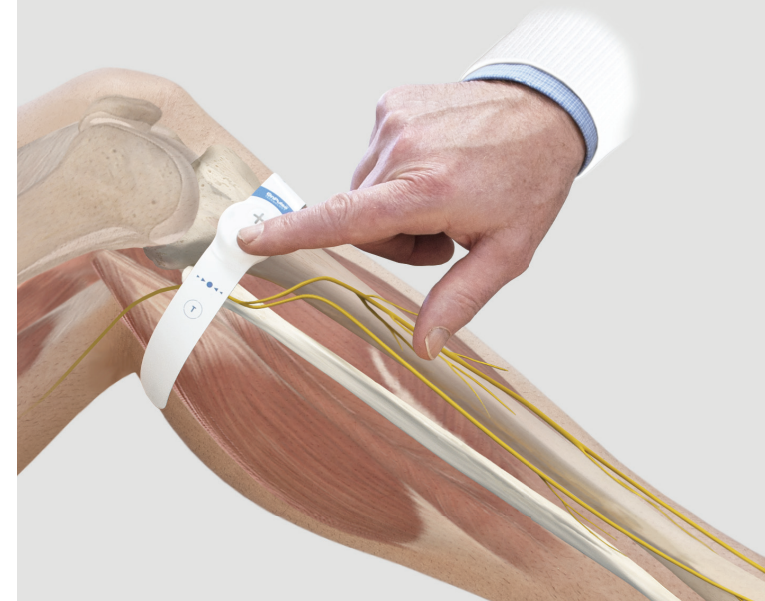
4 Turning On: To turn on, use a short press of the ⊕ button.



5 Settings: There are 11 settings, shown by the number of times the light flashes before a pause. Use the ⊕ button to increase the setting and ⊖ button to decrease. Increase the setting until you get a rhythmic upwards and outwards movement of the foot.



6 Switching Off: To turn it off, hold ⊖ button down for 3 seconds.



7 Removing: Remove carefully in one piece, to avoid damaging the skin.

