

Edema Stocking

- For Patients suffering from fluid accumulation in the legs

If you are suffering from swollen legs because of fluid accumulation, a new tool that measures how much fluid accumulation you have is now available. This means, you can follow the results of the treatment whether you relieve the fluid accumulation using movement therapy or medicine. In this way you can help to manage the treatment and adjust to your own needs.

Edema Stocking

- Monitoring accumulation of excess fluid in the legs

Content

Introduction	3
Edema	4
Edema Stocking	5
Benefits	6
What will it take?.....	7
Status	8
History.....	8
Contact.....	8



Introduction

If you are suffering from fluid accumulation of the lower limbs and sore feet, the condition is called edema, and can significantly lead to challenges in everyday life. The swollen legs can be an obstacle in everyday activities. Discomfort of edema causes immobility and the frequent visits to the GP or hospital for therapy and medical adjustments.

With edema it is difficult for you to predict when the heavy fluid accumulation will occur as the condition can vary from day to day - making it more challenging to schedule daily life. At the same time it can cause insecurity not knowing how the condition will develop, especially in cases where you are not able to be an active part in the disease process.



Edema

Edema can occur for many reasons such as heart failure and pre-eclampsia. Varicose veins, impaired lymphatic drainage and diseases of the kidney and liver are also known causes of edema, but a large contingency of patients have lower extremity edema without any verified underlying disease condition.

Edema should be treated with elevation of the legs and muscular exercise to engage versus drainage. Medical therapy predominantly entails diuretics. If patients notice accumulation of the legs, it is important to contact your GP in order to disclose a potentially underlying disease.



Edema Stocking

Fluid accumulation in the lower limbs can now be monitored with the Edema Stocking, which is a device that enables measurements of volume changes in the lower limbs.

The fabric of the stocking functions as a compression stocking, where the design makes it possible to adapt the size and circumference, by being able to zip different insert sizes on - S, M, L and XL.

The Edema Stocking detects changes in leg volume, this information is then stored on a mobile phone, and displays a graph showing how much fluid the leg has accumulated or reduced.

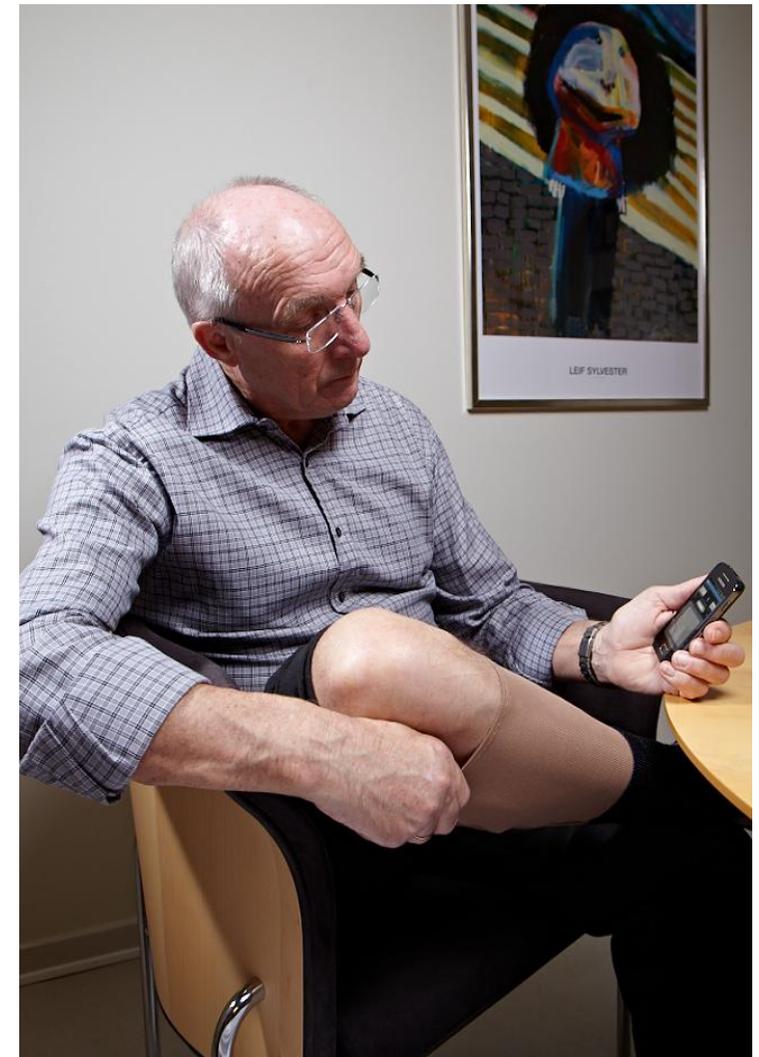
There is also an opportunity to send information to clinicians automatically or you can set the device to manual. It is recommended to send information to the clinicians so that they can follow your condition.



Benefits

The Edema Stocking helps to improve on the quality of life for edema patients:

- The Edema Stocking has a similar compression rate as a normal compression stocking, and helps to detect fluid accumulation in addition to relieving pain
- You can wear the stocking during exercise giving you immediate feed-back about the actual volume loss
- There is a possibility to monitor and detect early signs of water accumulation, which is important to overcome a possible disease
- When you are using the stocking, you become more actively involved by gaining more knowledge about the condition
- You and your relatives will save frequent hospital and GP visits
- The Edema Stocking gives you the opportunity of adapting to everyday life while living with the condition
- You can feel safer when you are consistently monitored



What will it take?

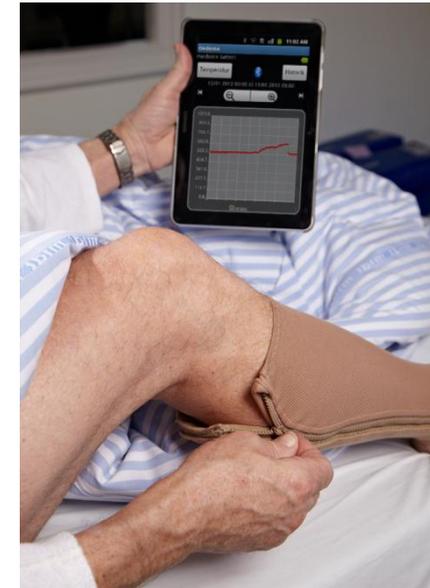
For this approach to be used by you as a patient suffering from edema, it requires that you are open-minded to learn basic techniques. You also need to download an application for this device on your mobile phone, PC or tablet.

Once swelling of the legs is detected, you will instantly be able to see it on the downloaded application. Note; the stocking must be connected to the application via Bluetooth.

As previously mentioned, you have the opportunity to send the information about the swelling to your clinicians manually, or you can set the phone to do it automatically.

The stocking is easy to wear, due to the simplicity of the design and a zipper down the side. This allows for all users to pull the stocking over their swollen legs.

Both the stocking and mobile phone application is easy to use, making it possible for everyone to manage.



Status

History

The Edema Stocking concept was originated by Prof. J. Michael Hasenkam, where he wanted to develop a user friendly technology that enables patients to self-monitor the level of edema and thereby handle the daily treatment and collaborate with clinicians at a more advanced level.

Ohmatex ApS is a company who works with intelligent textiles, and was approached to explore the feasibility of the concept and is now developing the final stages of the Edema Stocking.

Contact

For more information, questions, etc. contact;

Prof. J. Michael Hasenkam E-mail: michael@hasenkam.dk

Ohmatex ApS E-mail: chd@ohmatex.dk

