



Plaster Room

VACOped (Achilles Tendon)

Introduction

The Achilles tendon is the largest and strongest tendon in the body. It is located behind the ankle and connects the calf muscles to your heel bone. It is used when you walk, run and jump. Due to you recently injuring this tendon, you have been supplied with a VACOped which is like a bean bag; the liner is filled with polystyrene beads that mould around your foot and leg. Air is then vacuumed out so that the polystyrene beads contour around your foot and ankle to provide customised protection. This works with a rigid plastic outer shell to make VACOped very supportive for the wearer.

The VACOped was primarily designed and engineered for the treatment of Achilles tendon rupture. The Range of Motion (ROM) hinge allows the clinician to set your ankle at different angles of plantarflexion (pointing foot away) or dorsiflexion (pulling foot towards) and also allows for free, or a controlled degree, of ROM. Controlled joint movement is an important part of the rehabilitation phase, allowing the joints and muscles to gradually regain strength and range. The VACOped allows your foot and ankle to remain dynamic while still providing the support necessary for a full and quick recovery.

Fitting your VACOped

1. Pull the green ring valve upwards to allow air to flow into the liner and stroke to smooth out grouped beads.
2. Place your foot into the fabric liner and position it with your heel all the way back in the lower shell.
3. Close the fabric liner and pull slightly upwards.
4. Fit the upper shell on top, making sure not to position it against or over the valve.
5. Close the straps starting with the one over the ankle.
6. Push the green ring valve downwards, attach the suction pump and squeeze (approximately 7-8 times); this removes air from the beaded liner and creates a vacuum.

Changing the fabric liner

You should replace your fabric liner regularly for hygiene purposes, but please note, the replacement fabric liner does not contain a beaded liner within. When changing the fabric liner, you first must remove the beaded liner. Using the zip fastening at the rear of the fabric liner, remove the beaded liner, open the green ring valve and shake so that beads can redistribute. Place the beaded liner inside the replacement liner and slide the valve through the hole at the top.

Changing the sole

If you have been advised to change the sole on your VACOped, or you just want to remove it for bed, push both buttons located at the rear simultaneously. This will allow for you to remove the sole. Slide the new sole from the front and click into place at the rear. You should NEVER weight bear without one of the soles attached.

Changing the angle setting

The use and setting of the range of movement (ROM) is the decision of the clinician. You should NOT alter this unless instructed to do so and only at the given time frame.

Upper screw = end stop for plantarflexion (toes away from you)

Lower screw = end stop for dorsiflexion (toes towards you)

To change the angle, complete the following steps:

1. Remove key from the holder on the rear of the VACOped
2. Insert the key into the screw and turn horizontally
3. Move into the desired position from Achilles Tendon Pathway
4. Turn the key vertically to lock into place
5. Repeat the above steps from above if necessary for other screw.

Washing and showering

You can shower and enter water when wearing your VACOped. Simply towel dry the shell and swap to your dry fabric liner when you are finished. Please check you have your clinician's prior permission.

Washing fabric liner

Always remove the beaded liner from the fabric liner beforehand. Make sure the zip fastening is fully closed and then you can wash in your washing machine on a 60° cycle.

Can I walk in my VACOped?

Once you have been fitted with your VACOped, you are able to weight bear. You will need to use walking aids to assist with balance during the early stages. As time progresses, your weight bearing status will increase.

Can I remove my VACOped?

You should remove your VACOped once a day for hygiene purposes and to check for any pressure points. Take great care to maintain your foot in a position where your toes are pointed away from you (plantar flexed). You will also be required to remove it to complete your physiotherapy programme. Your clinician will inform you of any other instances you can or should remove your VACOped.

Exercises

It is important to exercise all joints not immobilised in your VACOped and to repeat every hour until fully functional. This helps to reduce swelling, stiffness, maintain some muscle strength and improve circulation. This can be painful and difficult to start with, but should improve within the first week.

- Wiggle your toes regularly
- Fully straighten and bend your knee
- Gently clench the muscles in the back of your calf and thigh to improve blood flow
- Move your hip.

Driving

Your insurance may not be valid whilst you are being treated within your VACOped. It should be stressed firmly that patients **DO NOT** drive whilst wearing.

After your VACOped has been removed

Due to the long period of time that your limb has been immobilised, you may experience some of the following so do not panic. You may find that your leg feels thin and strange; this is normal.

- You may experience swelling, discomfort and stiffness in the affected limb. This is quite normal and may continue for several weeks. You may find it helpful to keep the limb elevated
- Your skin may be dry and itchy. Do not scratch; try using baby oil or moisturiser
- Your skin will be sensitive. Be careful if going in the sun and apply a sun block
- Physical activities eg manual labour, sport etc should be reduced or avoided during the first few weeks after.

On the day of your follow-up appointment

You may require several treatments during your visit to clinic, such as x-rays and dressings. This, along with varying numbers of patients, means that sometimes you may have to wait longer than we would like so we apologise for any inconvenience in advance.

DVT signs and symptoms

Due to immobilisation and reduced mobility, there is a higher risk of developing a DVT (Deep Vein Thrombosis). It is important to stay as active as possible, drink plenty of fluids and be aware of the signs and symptoms.

Please contact the plaster room or the Emergency Department immediately if you experience any of the following:

- Pain in the calf, thigh or chest
- Sudden onset of shortness of breath with no physical exertion.

- Swelling of the leg
- Increased or decreased warmth of the leg
- Redness in the leg
- Bluish skin discoloration.

Pressure ulcer

A pressure ulcer (sore) is a type of injury that breaks down the skin and underlying tissue. A small number of high risk patients are at increased risk of developing a pressure ulcer in a VACOPed, which severely reduces mobility.

- Make sure to regularly reposition your leg throughout the day so that you are not constantly resting on the same area for long periods of time (every 2 hours).
- If you notice any discomfort or pain under the VACOPed, most noticeably at the edges or heel, please contact the plaster room for urgent review.
- Ensure the top and bottom of the VACOPed is not rubbing and leaving red marks.
- Do not rest the leg on the heel for long periods of time and place a pillow under the leg.

Further advice and instruction



Contact us

If you experience any of the following:

- Your toes become painful, swollen or blue
- You are unable to move the limb/joints
- You feel “pins and needles” or numbness in the limb
- Any “burning”, “blister-like” pain or severe irritation under the boot
- Discharge, blood staining or wetness
- Excessive itching.

Please contact the plaster room where a booked appointment can be made for you to return for assessment. Arriving without a prior appointment may result in longer waits or having to return at a convenient time. Outside of plaster room hours please contact your local Minor Injuries Unit or the Emergency Department if urgent.

Useful Websites:

<http://foot.oped-uk.com/vacoped>

Contact Numbers:

We hope that you have found this information useful. If you have any questions or are worried about anything, please speak to the following Dorset County Hospital Staff:

Orthopaedic Practitioners: James Vincent, Sarah Nelmes, Zara Penwell

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If you have feedback regarding the accuracy of the information contained in this leaflet, or if you would like a list of references used to develop this leaflet, please email pals@dchft.nhs.uk



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