

UNIVERSITY HOSPITAL LLANDOUGH
ALL WALES
ADULT CYSTIC FIBROSIS CENTRE

The Vest (HFCWO)

What is the VEST?

The VEST Airway Clearance System consists of an inflatable garment that is connected to an air pulse generator via air hoses. It helps with the removal of secretions through High Frequency Chest Wall Oscillation (HFCWO) technology.

The garment (see pictures below) is worn, with the air pulse generator creating bursts of air that inflate and deflate the garment against the chest wall at a rate of up to 25 times per second. The vibration of the vest dislodges mucus in the airways and helps to move the secretions from the smaller to the larger airways, where they can be more easily cleared by huffing or coughing.



How to use the VEST

1. Place the garment over a layer of clothing. Adjust the straps so that the garment is positioned over your chest. Make sure that the garment is not fitted too tightly, ensuring that your hand can fit comfortably between your chest and the garment.
2. Press the 'on' button on the VEST machine.
3. Use the 'up' and 'down' buttons on the machine to adjust the frequency, pressure and time settings for your treatment. Your Physiotherapist will be able to guide you with selecting the appropriate settings for your treatment.
4. Press the 'on' button on the machine or squeeze the handheld pump to start the VEST. The vibration of the garment will gradually build until the selected settings have been reached.
5. Stop the VEST machine every 2-3 minutes to perform airway clearance (huffing or coughing). This can be done using the 'off' button on the machine or by squeezing the handheld pump.
6. Repeat steps 4 and 5 over approximately 15 minutes of treatment.
7. Switch off the VEST machine and remove the garment once treatment completed.

Helpful Tips

1. To prevent any nausea, aim to use the VEST machine before meals or at least one hour after meals.
2. Ensure the VEST machine is used at least one hour after DNase has been taken.
3. Treatment with the VEST can be completed in any position, and can therefore be combined with postural drainage positions as appropriate.
4. Airway clearance between each cycle of the VEST is not limited to huffing and coughing, adjuncts such as a PEP mask or acapella can also be utilised in this period.
5. Please ensure that the VEST machine is cleaned as per the instructions provided once treatment is complete. Your Physiotherapist will be able to provide you with further information.

Stop if you...

Develop new symptoms such as:

- Increased shortness of breath
- Chest pain
- Chest tightness
- Blood in your secretions.

Seek advice from your physiotherapist immediately if any of the above symptoms arise.

If you require any further information regarding the VEST or any other physiotherapy techniques please do not hesitate to contact us:

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