

AT A GLANCE: LEECH THERAPY

Who does this information apply to?

All registered healthcare and training healthcare professionals using leech therapy within OUH NHS Foundation Trust.

What are the key points?

Any surgical intervention that involves the manipulation of the veins carries the risk of venous congestion. Venous congestion occurs due to an imbalance between arterial inflow and venous outflow, and results in the stasis of the blood in the tissues that are normally drained by the affected veins. Medicinal leeches are used for the salvage of tissue with venous congestion in the critical post-operative period when arterial flow is unable to match the venous outflow. Delay in treatment of the venous congestion can lead to cell death resulting in failure of tissue survival of free tissue transfer and re implantations of a digit. Leech therapy reduces venous congestion via several methods:-a) removal of static blood by actively sucking, b) passive oozing of the leech bite/ wound following detachment, and c) active ingredients within the saliva having an anticoagulant effect, therefore prolong bleeding locally.

Equipment required by the 'handler':

- Plastic apron
- non-sterile gloves
- plastic forceps
- leech(es)
- gauze
- film dressing (optional)
- secure plastic pot, such as a specimen pot or denture pot
- 70% alcohol solution.

Procedure

- Leech Therapy must be prescribed on EPR: NHS Foundation Trust Adult Antimicrobial Guide, <http://microguide.horizonsp.co.uk/viewer/ouh/adult> and follow Prophylaxis, Antibacterial prophylaxis for surgery, Plastic surgery and see leech therapy).
- Clean your hands (see the Trust Infection Prevention and Control policy).
- Wear non-sterile examination gloves and a plastic apron.
- Cleanse the skin with sterile water to remove any gel, exudate and debris to promote attachment of the leech (es) to the skin.
- Gently pick up the leech with forceps and place the head of the leech at the desired location. The head of the leech (the biting end) can be recognised by its searching movements, while the tail end is used mostly to sucker for fixation.
- Record the number of leeches applied and length of time the leeches feed on the care plan.
- Monitor the colour and temperature of the skin and amount of blood loss from the attachment site. The leeches can feed for 15-60 minutes and should be checked every 15 minutes during this period.
- Account for and remove all detached leeches when they naturally detach from the feeding site with forceps. Place the used leeches in a secure plastic container with 70% alcohol solution.
- Never pull the leech off the skin as this may damage the tissue or cause the leech to regurgitate bacteria from the gut.
- Dispose of the used leeches in a container following procedures for contaminated biological waste products (See Trust Infection Prevention and Control policy).