

FACTSHEET

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Leech Therapy

When is leech therapy needed?

Sometimes after surgery to re-attach a body part, such as a finger, the blood supply is damaged and blood can get into the finger, but cannot get out. The old blood remains in the finger. It stops the new blood from supplying the finger with oxygen and nutrients. The finger becomes swollen and purple and this is called venous congestion. If the old blood is left in the finger, the re-attached part of the finger will often die.

Modern leech therapy has been used since the 1960s. It has been proven to be helpful after re-attachment surgery. It helps with blood circulation for re-attached fingers and areas of transplanted skin and muscle (grafts).

How does leech therapy work?

Leech saliva has many substances that stop blood from clotting and helps bleeding. Leeches are put on re-attached fingers or grafts that have venous congestion.

How it works

- The leech makes a small bite in the finger or graft
- It injects substances into the finger or graft to prevent the blood clotting in that area
- The leech removes a small amount of blood and drops off after about half an hour
- The finger or graft is encouraged to bleed (drop by drop) to allow the old blood to escape through the leech bite
- New blood can then enter the finger or graft

How long does leech therapy last?

Sometimes the leech therapy is needed for up to a week. Each child is different, depending on the injury, it can take 5 to 7 days for blood vessels to form or heal.

Where do the leeches come from?

The leeches are medical grade leeches. They are a particular species of leech called *Hirudo medicinalis*, grown in a medical leech farm. In NSW, they are provided by Liverpool Hospital.

Are there any risks involved?

Yes. Leeches can cause infection. Leeches contain bacteria needed for digesting blood. There is a small risk the bacteria could get into the finger or graft and cause an infection. Children undergoing leech therapy must be on antibiotics that will kill the bacteria.

Some people are allergic to leech saliva.

Blood levels of children must be monitored while they are having leech therapy.

Are there any difficulties with leech therapy?

Sometimes leeches do not want to attach to a finger or graft. This can be because there are chemicals in the skin the leeches do not like. The nurses and doctors will try to help the leech attach.

Sometimes, even with leech therapy, the re-attached finger or graft may not survive.

Does leech therapy hurt?

No. Often the re-attached part has no feeling, and the leech saliva contains substances that prevent pain.

Leeches look scary

The biggest problem people have with leech therapy is that the leeches are not nice to look at. A polystyrene cup or covering can be placed over the affected area so your child cannot see the leech.

Many children and young people who have leech therapy are very interested in the leeches and it is a great story to tell all their friends at school.

What happens to the leeches after the therapy?

Unfortunately the leeches contain human blood and cannot be used again. They are regarded as contaminated. When the therapy is finished, the leeches are put to sleep humanely.

Remember:

- Leeches have been used for many years to improve blood circulation in re-attached fingers and grafts.
- Leeches look strange, but are interesting and can be helpful.

References

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