

Benefits Of Leech Therapy:

Since the time of ancient Egypt, leeches have been used in medicine to treat nervous system abnormalities, dental problems, skin diseases, and infections.

Today, they're mostly used in plastic surgery and other microsurgery. This is because leeches secrete peptides and proteins that work to prevent blood clots. These secretions are also known as anticoagulants. This keeps blood flowing to wounds to help them heal. Believe it or not, leech therapy is sometimes the best alternative in treating illnesses, and even surpasses pharmacological treatments. Because of its healing effects to the human body, this traditional method of curing diseases is still thriving today.

Currently, leech therapy is seeing a revival due to its simple and inexpensive means of preventing complications.

How does leech therapy work?

Medicinal leeches have three jaws with tiny rows of teeth. They pierce a person's skin with their teeth and insert anticoagulants through their saliva. The leeches are then allowed to extract blood, for 20 to 45 minutes at a time, from the person undergoing treatment. This equates to a relatively small amount of blood, up to 15 milliliters per leech. Medicinal leeches most often come from Hungary or Sweden.

There are several situations in which leech therapy may be used. People who may benefit include those who risk limb amputation due to the side effects of diabetes, those who have been diagnosed with heart disease, and those who are undergoing cosmetic surgery in which they risk the loss of some of their soft tissue. The therapy has also been recommended to treat blood clots and varicose veins.

People with anemia, blood clotting conditions, or compromised arteries are not candidates for leech therapy. Children under the age of 18 years old and women who are pregnant are also usually advised to avoid it.

Medical applications for leech therapy

During a session, live leeches attach themselves to the target area and draw blood. They release the proteins and peptides that thin blood and prevent clotting. This improves circulation and prevents tissue death. The leeches leave behind small, Y-shaped wounds that usually heal without leaving a scar.

Leeches are effective at increasing blood circulation and breaking up blood clots. It should be no surprise that they can be used to treat circulatory disorders and cardiovascular disease.

Chemicals derived from leech saliva have been made into pharmaceutical drugs that can treat:

- hypertension
- varicose veins
- hemorrhoids
- skin problems
- arthritis

Clinical trials suggest that leech therapy is an appropriate treatment for the common joint disease osteoarthritis. The anti-inflammatory and anesthetic properties in the leech's saliva reduce pain and tenderness at the site of the affected joint.

How do Leeches drink blood?

- They attach themselves to their hosts only until they become full, after which they will simply fall off and start digesting the blood they sucked out.
- When they are sucking blood they release an anaesthetic, which is the reason why you don't feel the leeches when they bite.
- They then use suction and mucus to stay on their host.
- Once they open up a bite wound they secrete an anti-clotting enzyme called Hirudin into the bloodstream so that blood will keep flowing.

- Sometimes the blood will continue to seep for hours after the leech has been removed, which is due to the anti-clotting enzyme.

While all this may sound disturbing, being bitten by a leech isn't deadly or dangerous, in fact, leeches are harmless.

The amount of blood loss isn't really significant and when they're full, which doesn't take long, they simply fall off and go on with their lives.

Healing Qualities of Leeches

- The European Medicinal Leech or *Hirudo Medicinalis* are used for microsurgery, grafting, and for reconstructive surgery.
- Doctors use leeches for microsurgery because of their ability to remove blood that has coagulated. They relieve venous congestion and muscle flaps.
- Leeches have anticoagulant, clot dissolving, anti-inflammatory, vasodilating, bacteriostatic and anesthetic effects that can be used to treat a variety of diseases and conditions.
- Leeches are also known to treat black eyes.
- Hirudin can be used to treat infections of the middle ear and is being tested as a systemic coagulant.
- Leeches were popular during medieval times because they were known to cure infections, and remained a great option for treating infections until antibiotics were discovered.