



Leech Therapy

They bite, slither, and slide -- and they save fingers and lives.

While the sight of a wriggling, blood-sucking leech may make many people feel queasy, the spineless worms can also help people feel better -- as NATURE's BLOODY SUCKERS shows. The ancient physician's art of using leeches has made a modern medical comeback: the worms help doctors do everything from reattach severed fingers to treat potentially fatal circulation disorders.

Leeches -- which are found all over the world, living mostly in fresh water -- have long had a place in the doctor's medical kit. Five thousand years ago, Egyptian medics believed that letting a leech sip a sick patient's blood could help cure everything from fevers to flatulence. And in medieval Europe, leeches were so closely associated with doctors that physicians were called "leeches" -- and they used millions of the parasites annually to treat patients.

In the 20th century, however, most doctors turned away from the worms, which in nature feed on everything from frogs to alligators. A few physicians, however, saw that leeches might play a special role in certain kinds of surgery, by helping promote blood flow to damaged tissue. That's because when leeches bite a victim, their unique saliva causes blood flow to increase and prevents clotting. As a result, once bitten, victims can bleed for hours, allowing oxygenated blood to enter the wound area until veins re-grow and regain circulation.

The leech is invaluable in microsurgery when faced with the difficulties of reattaching minute veins. Ears have such tiny veins that, in the past, no one was able to successfully reattach them. Then, in 1985, a Harvard physician was having great difficulty in reattaching the ear of a five-year-old child; the tiny veins kept clotting. He decided to use leeches and the ear was saved. This success established leeches in the modern medical world. Since then, leeches have saved lives and limbs, reducing severe and dangerous venous engorgement post-surgery in fingers, toes, ear, and scalp reattachments; limb transplants; skin flap surgery; and breast reconstruction.



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