



Leeches as medical devices
http://www.msnbc.msn.com/id/5319129/ns/health-health_care/t/fda-approves-leeches-medical-devices/

On leeches and maggots

Although blood-sucking leeches were first used medically back in the time of ancient Hippocrates, by the time of the War of 1812 European countries imported over 100 million

leeches every year to meet the demand. The little suckers were allowed to gorge themselves because they also secreted a mixture of substances that included an anti-coagulant and anaesthetic. In effect they painlessly drained inflamed wound areas where veins weren't working normally long enough for healing to take place. Leeches could suck in up to 10 times their own body weight in blood until they became totally engorged and fell off. Leeches were scarce in England from 1800–1825 but during the War of 1812 Edward Cutbush an officer and surgeon in the U.S. Navy had leeches attached to wound edges to reduce swelling. In 2004 America's FDA cleared medicinal leeches as a medical device; today they are used world-wide for certain skin grafts and for reattachment microsurgery.

Maggot debridement therapy was also approved by the U.S. FDA in 2004. During debridement, which is the removal of dead and damaged tissues, the squirmy blow fly larvae eat away rotting flesh while they secrete anti-bacterial chemicals. Don't worry, the ugly critters don't have a taste for living flesh—so—forget the horror movies. Surgeon "Tiger" Dunlop considered maggots an irritant during the War of 1812 but WWI military surgeon William Baer first saw the value of the maggot's work during WWI when the wounds of soldiers were cleaner when they'd been infested by maggots. Until antibiotics came into use it was common practice to leave the maggots. Today maggots are employed on any non healing wound that contains dead tissue, including pressure ulcers, venous ulcers, traumatic wounds, surgical wounds, and diabetic ulcers. In July 2012 at a Scarborough, Ontario Hospital, surgeon Dr. Marietta Zorn and a nurse, Rose Raizman, with a wound treatment specialization received Canadian government approval to use blow fly maggots shipped from California. Three

times they applied 800 maggots to a patient's leg and then covered it with a mesh dressing for 36 hours so that the maggots could breathe and eat dead flesh. The patient was very grateful that his leg did not have to be amputated.

Why the fascination with leeches and maggots? It's war and medicine 1812–2012.



Maggots to the rescue of Scarborough man's leg
VIDEO www.intelligencer.ca/2012/07/06/maggots-to-the-rescue-of-scarborough-mans-leg