

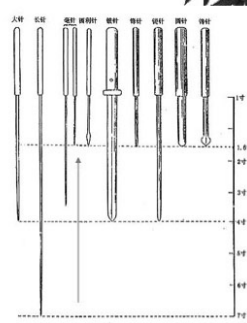
What points do we bleed? extra-meridian acupuncture points

- * **Shixuan** – for forele Blood Stagnation



What Needles? (*ling shu* in *Nei Jing*)

- * The 4th needle from the right was used for bleeding
- * It is a short, tube-like shaped and hollow = hypodermic needle as 25/23/21 g



But what is the best tool to be used?

Medical leeches (*Hirudo medicinalis*)

“Medical leeches are the best equipped creatures in our globe to locate Excess, especially Excess with Blood Stasis/ Stagnation.

It is due to the fact that all their existence is about locating the points in Excess, and be able to get an easy way to harvest blood” – Zhang Zhong Jing , *Golden Chamber Jade Palaces Channels*

Dr. Zhang ZhongJing (張仲景) 150-219 A.D

One of the most well known & be-loved Chinese physicians who wrote two classics – *Shang Han Lun*, discussion of cold induced disease, and *Jing Gui Yao Lun*, Synopsis of Prescriptions of the Golden Chamber. These works are still used today for the diagnosis & treatment. He is the founder of the Blood Stasis Theory.

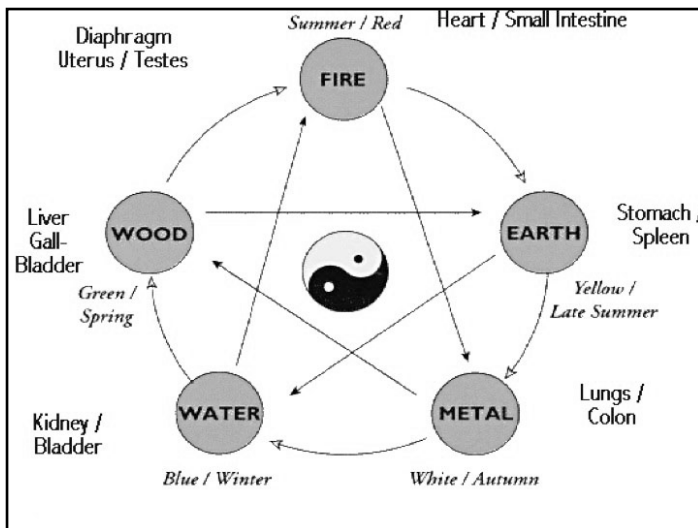


Hirudo medicinalis

- * Is named in Chinese “ **Shui zhi** ”
- * Considered to quicken *Xue* (Blood), resolve *Xue* Stasis, and resolve Qi Stagnation
- * Rx: Put the leeches on the mentioned acupuncture points
- * Can also be found as a baked powder and has to be taken orally as part of herbal remedy 0.3 – 0.6 grams once a day for as long as needed (but contra-indicated for certain conditions as given before [e.g. a pregnancy])

An additional benefit

Use medical leeches as Diagnostic tool if we let the leeches to select the points they will go to the points in Excess, and we can work our way back in the Ko cycle, and find out the Zang-Fu organ or meridian in Deficiency, and treat these deficient acupuncture points later by dry acupuncture



An additional benefit

due to the bacteriostatic and anesthetic abilities of the medical leeches, we can apply them to an area/tissue/an acupuncture point to be treated that are heavily contaminated & a very painful one

- * Leeches have been used for ages all over the globe (East & West) for solving Blood Stagnation in people and animals
- * e.g. - Louis Pasteur for his brain strokes = BLOOD STAGNATION (leeches were put bi-laterally at area we call TH-17)



LEECH (lēch) *n.* a physician; an aquatic sucking worm, used for the abstraction of blood;—*v.t.* to bleed by the use of leeches [A.S. *læce*, one that heals].

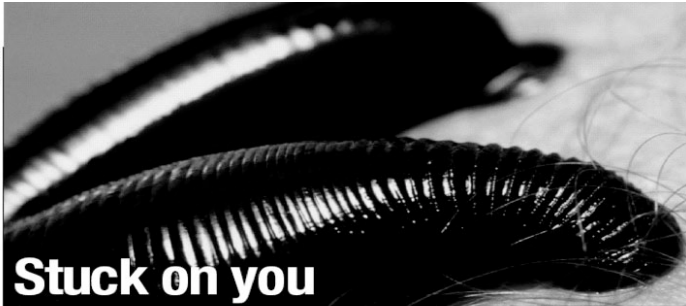


June 28, 2004 –

- * FDA Clears Medicinal Leeches for Marketing
- * FDA determined that leeches are medical devices

Nov 4, 2004 “Nature” -

- * 80% of Britain 62 plastic-surgery units have used leeches post-operatively in the past five years



Stuck on you

Recent studies are pointing the way for new uses of an ancient treatment — leeches. Helen Pilcher wades in to find out how these creatures could help the arthritic.

They've got three jaws, with some 300 teeth, and they like to feast on human blood. "I've only been bitten around 20 times," says Carl Peters as he plunges his hand into a tank of swirling, hungry leeches. "There's about 5,000 in here," he adds casually. Peters is assistant manager at Biopharm, a company in Wales that breeds and supplies the carnivorous worms (*Hirudo medicinalis*) for medical use worldwide. Most of the 70,000 leeches produced here annually end up draining blood from the swollen faces

of leeches from Leeches USA for just \$7.70 each (the minimum order is seven), and have them delivered to your door, complete with a 'mobile home' for the creatures at just over \$100 a shot. And the market may be growing: in June this year, the French company Ricartimpex SAS was granted a licence to market the creatures as 'medical devices' in the United States. From the first firm to get such a licence since regulation started in the 1970s. Humans and leeches have a long history together. Images of leeches have been found on the walls of an ancient Egyptian tomb.

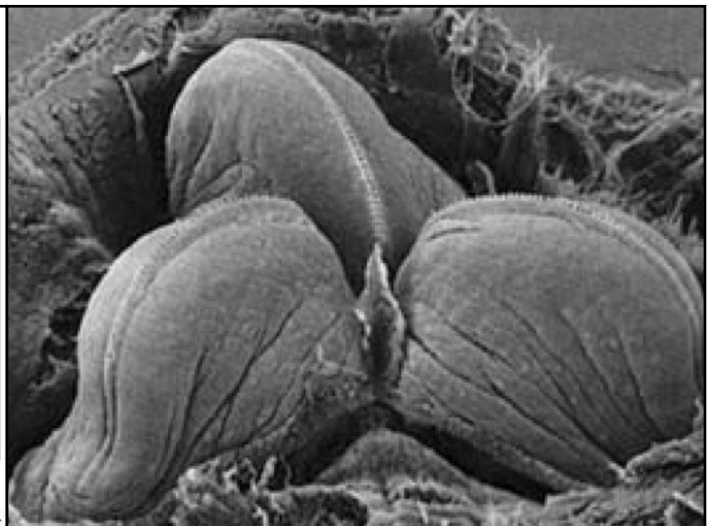
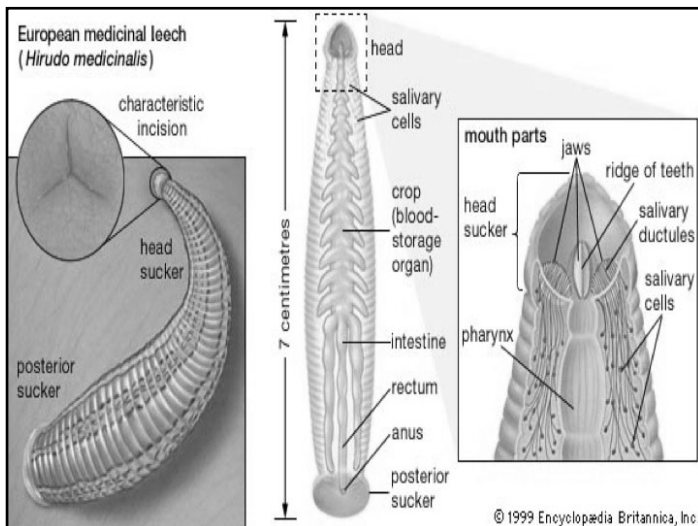


Blood vessels: leeches attach themselves by suckers (above) and can drink ten times their own body weight in blood. © 1999 Encyclopædia Britannica, Inc.

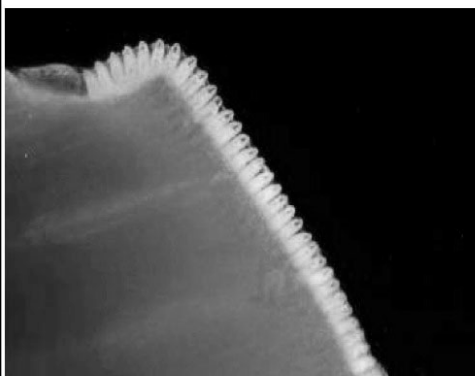
Leech biological data & actions

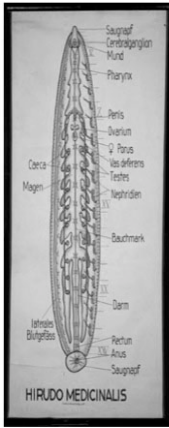


Leeches (Hirudinea) are slippery hermaphrodites bloodsucking worms with segmented bodies, belongs to Annelids classification (as earthworms)



Hirudo medicinalis





- * Hirudin
- * Vasodilator
- * Destabilase & hyaluronidase
- * Local morphine-like analgesic
- * Bacteriostatic component
- * Regenerative & immuno-modulatory substances
- * NSAID – leech derived tryptase inhibitor

We use leeches – as far as TVM, and as well as classical/western medicine – for solving Blood Stagnation –

Bloodletting for congested & inflamed parts of the body as in cases of k-9 aural hematoma, equine laminitis, k-9 prolapsed rectum, bovine prolapsed uterus etc.



We use leeches – as far as TVM, and as well as classical/western medicine – for solving Blood Stagnation –



Hirudo medicinalis – before application



Hirudo medicinalis – application



Hirudo medicinalis – attached



Hirudo medicinalis begins to suck



Hirudo medicinalis – #'s 2



Hirudo medicinalis



Hirudo medicinalis – “working”



Hirudo medicinalis – “almost done!”



Hirudo medicinalis – post- ingestion



Hirudo medicinalis – post-ingestion



Hirudo medicinalis – dog post leeching

- * Terms: TVM Hemoacupuncture with leeches
- * Terms: Veterinary hirudotherapy
- * The application of medicinal leeches for therapeutic purposes in animals according to TVM principles or western principles



We mentioned before Acute Equine Laminitis (Pathology/ Pathogenic Heat) – Rx Protocol

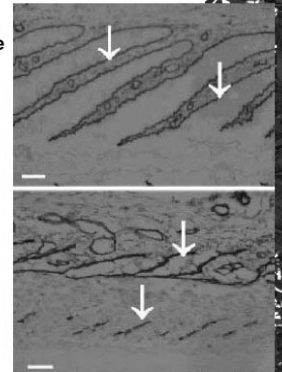
- Shave the coat proximal to the hooves (if possible)
- Wet the affected legs with lots of cold water (non-chlorinated)
- Using acupuncture needle – puncture the 6 Jing-Well/Ting points, and apply 1-2 leeches on each of the points
- (Or - just put horse's leg in a bucket of non-chlorinated water with 6-12 leeches for each leg)
- Also can add 6 more leeches - each one of them on a proximal acupuncture point of the different 6 meridians
- Re-evaluate horse after 12 hrs: done on 36 diagnosed horses with acute laminitis – 33 of them were normal after 12 hrs.
- Note: most of leeches go to SI-01+HT-09



Equine Laminitis – do we need some science here?

Why leeches are doing “the magic” as far as western medicine? They work on the blood vessels issue, but also –

- 1) lamellar basement membrane at the top jpg is a normal one & in a normal horse
- 2) but separated and lysed by proteinases at bottom jpg in acute laminitic horse – leading to a pedal bone separation & rotation – but - leeches release inhibitory enzymatic proteins (as Eglin C, Hirudin) that halt the proteinases activities, and by that arrest the separation and rotation



Blutegeltherapie bei Hufrehe der Pferde
Ergebnisse einer bundesweiten Studie

Veterinary hirudotherapy for horse laminitis
Results of a nationwide study in Germany
Konstanze Rasch

Zeitschrift für Ganzheitliche Tiermedizin 2010; 24(1): 24-29
DOI: 10.1055/s-0029-1240750

Summary

The objective of the study conducted from May 2008 to August 2009 by the German Hoof Orthopaedic Society (Deutsche Huforthopädische Gesellschaft e. V.) was to investigate the efficacy of hirudotherapy in treating laminitis. The data was collected from 112 bloodsucker applications in 57 laminitic horses. In 84 % of the cases, evidence of improvement in the clinical symptoms was noticeable after the application of hirudotherapy. The study results vividly show that the use of bloodsuckers in the treatment of laminitis comprises of meaningful therapy measures especially for acute cases.

Note:

If you remember – in our own work – clinical success rate was 91%, but here (German study) – only 84%...

Why? Because in our study we did only acute laminitic horses, and in the German study they had also a few chronic cases... that if you remove them from the calculation– you'll get 89%...not bad ☺

Application to proximal acupuncture points -



What are the classical/western medicine clinical uses ?
relate it to TVM

- * Reconstructive Sx
- * Deep thrombosis as in feline saddle thrombus



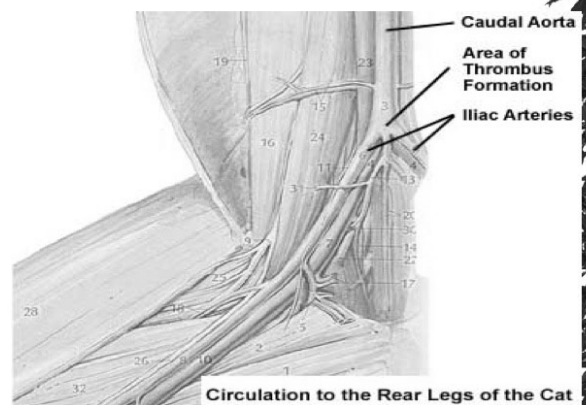
The Internet Journal of Plastic Surgery™
ISSN: 1528-8293

The use of the medicinal leech, *Hirudo medicinalis*, in the reconstructive plastic surgery

Again – we mentioned this area at the pathology part of the lecture



Feline Aortic Thromboembolism/ Feline Saddle Thrombus

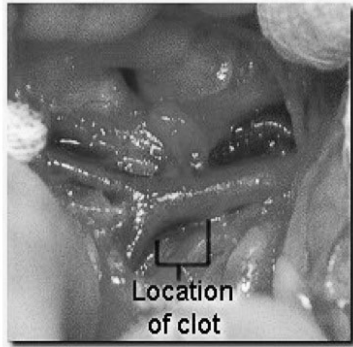


Feline Aortic Thromboembolism/ Feline Saddle Thrombus

Again – what we have here as far as pathology, pathogenesis, history, clinical signs according to TVM?

Blood Stagnation

Due to Qi Deficiency at the heart



Feline Aortic Thromboembolism/ Feline Saddle Thrombus

What can be done as far as WVM nowadays & successfully for this cat?

Not much...

What can be done as far as TVM nowadays & successfully for this cat?

A lot by using Hemoacupuncture with leeches



Feline Aortic Thromboembolism/ Feline Saddle Thrombus

- * Acute hind legs paresis/ paralysis with hyporeflexia
- * Absent of femoral pulsations
- * Cold, pale-to blue limbs, painful hind legs



Feline Aortic Thromboembolism/ Feline Saddle Thrombus

- * Cyanotic nail bed with no bleeding from a cut nail
- * NB – note the one drop of blackish blood (= TVM Blood Stagnation)



Rx Protocol:

- Shave both inner thighs
- Sedation – as needed due to painful legs (remember it is BLOOD STAGNATION and pain is a common clinical sign)
- Wet shaved area with cold non-chlorinated water
- Apply the first leech
- Leeches will work their way in – usually to acupuncture points as LIV-10, SP-11



Rx Protocol:

- * After 5 minutes – apply the second leech on the same leg & area

