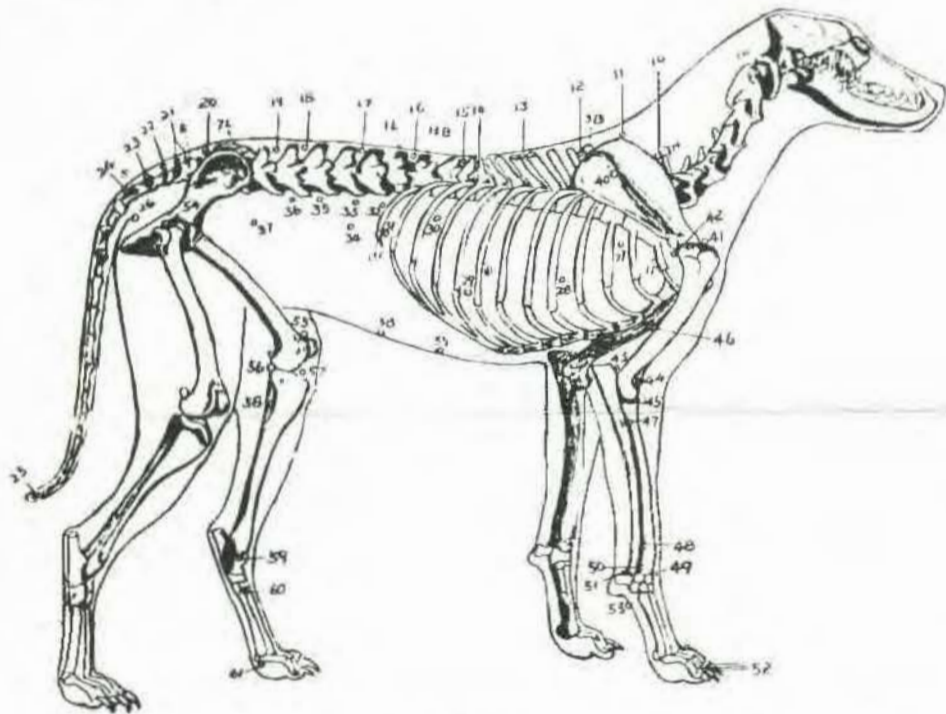




Bruiser, a seven-year-old Doberman undergoes his eighth weekly treatment for lick granuloma by acupuncture.



WITH THE PRICK OF A NEEDLE

Photographs
By Anthony B. Wood

The big red Doberman pinscher rested quietly on the table, stretched out relaxed and enjoying the attention of Susan Gallagher, a veterinary anesthesia technician at VHUP. The dog watched the people in the room and took no notice of the four needles in his legs.

Two needles were visible on the front leg, one at the elbow and the other near the pastern. The other two needles were in the rear leg, one in the calf muscle and the other near the toes. Alan M. Klide, V.M.D., associate professor of anesthesia, checked the positions of the needles and then Miss Gallagher attached electrodes to them and turned on the current. As she carefully adjusted the strength of the alternating current, the muscles between needles on each leg began to twitch faintly.

"The current is low, just enough to stimulate the muscles and to cause the mild twitching," explained Dr. Klide. The dog didn't blink an eye and continued to relax. After twenty minutes of treatment the needles were removed and he jumped from the table to make the rounds to be petted.

This was his third acupuncture treatment. "He has a large lick granuloma on his hind leg and is developing another on the front leg," said Dr. Klide. "He has been under treatment for five years and nothing has worked. So we are trying acupuncture in the hope that it will help."

Dr. Klide is one of about 100 veterinarians in this country who practice acupuncture. He became interested in it as means of anesthesia but found that it was difficult to use for that purpose as animals will not remain still for very long. "It is a feasible technique for anesthesia for certain procedures," he said. "We recently did a Caesarian section on a dog, acupuncture worked fine, but the technique really is not feasible for a busy hospital. It takes longer and the

acupuncture points have to be continually stimulated. If the practitioner has the time, it is suitable. We also operated on several sheep using acupuncture analgesia which was successful."

The Chinese believe that through acupuncture the basic dynamic energy in the body is manipulated by redirecting its flow and by restoring the balance of energy.

Research on acupuncture is being conducted here at Penn and at Purdue University. "When I became interested in acupuncture, I attended seminars for physicians; later there were seminars for veterinarians and I gathered as much material as I could find. Now there is a professional organization, the International Veterinary Acupuncture Society, a group which holds annual meetings and publishes research findings." Dr. Klide has written a textbook, *Veterinary Acupuncture*, co-authored by Shui H. Kung, Ph.D., and published by the University of Pennsylvania Press. It has gone into its second printing.

Acupuncture is an ancient art, practiced by the Chinese for more than 4,000 years. It has been known in the western world for several centuries but it has never been practiced widely. Interest in acupuncture suddenly increased after President Nixon's trip to China in the 1970s. Physicians traveled to China to observe the techniques and soon veterinarians became interested as acupuncture in China is widely used in veterinary medicine.

Acupuncture traditionally is



thought of as a treatment where needles are inserted at certain points of the body. "But that's not all, acupuncture treatment may be done by applying pressure to a point, by inserting needles and connecting them to electrical stimulators, by injection, by implantation of metals, by laser beams, by heat or by cold," explained Dr. Klide. "It is acupuncture when one or more acupuncture points are stimulated by these means.

"We know it works, but we do not know why completely." Research has shown that acupuncture stimulation, even a single insertion of a needle, excites nerve cells and synapses in the spinal column that have an inhibitory effect on pain. By stimulating an acupuncture point the pain sensations are blocked out.

According to Dr. Klide, researchers have found that acupuncture causes cells in the brain and the spinal cord to produce certain morphine-like, painkilling substances. Research has also shown that acupuncture stimulation of specific points can increase the production of hormones. It has also been demonstrated that acupuncture can change the level of white blood cells in the body.

The mechanism of these phenomena is not exactly understood. "We need research and a group of veterinarians that treat a large number of diseases by acupuncture to document and report their findings," he said. "The Chinese in the past did not give statistics and it is not totally clear whether acupuncture alone works in certain cases or whether improvement is due to other factors."

Chinese medicine treats all ailments by acupuncture and the explanation of why acupuncture works has its roots in Chinese philosophy. It is believed that the body, its organs and their function interact and react to each other to maintain a balance, "yin yang," and that disease occurs when this balance is upset. The Chinese believe that through acupuncture the basic dynamic energy in

the body is manipulated by redirecting its flow and by restoring the balance of energy. The elaborate Chinese acupuncture charts are based on this principle. Acupuncture points were determined by how the ancients believed the energy flowed and how the organs interacted. **This may appear rather mystical, but** research has found that the points designated by these charts do show different electric properties than other areas of the body. Most of the points are near major nerve trunks and manipulation can have an effect on different areas of the body. The charts exist not only for humans but also for animals, horses, cattle, chickens, pigs and other domestic animals, including the dog.

The traditional tools of the acupuncturist are fine needles, ranging in length from 1/4 to 8 inches. They are made of steel, silver, and gold, depending on their purposes. The needles are inserted and then either twirled or rotated slowly, or fast, depending on the effect desired; they may be moved in or out or left in place for a period of time. Some needles may be heated before insertion. Other needles are wide, these are used for bleeding, though that is not in the traditional sense of bloodletting, rather it means a quantity of blood is being let out at an acupuncture point. Other acupuncture tools are tiny gold beads which may be implanted under the skin, or small steelballs which are taped to an area to provide pressure.

The contemporary acupuncturist also utilizes electric current, laser beams, and ultrasound. Injections of water or air may also be utilized. "We have used acupuncture for about five years at New Bolton Center, mainly for horses but also for other animals," said Dr. Klide. "Most of the patients are those with chronic lameness and we have helped quite a few. They have returned to racing, jumping or dressage. In some cases the treatment had to be repeated after a few months, in other cases it was more than a year before the horse

needed another treatment." Dr. Klide explained that acupuncture is often used at racetracks to provide relief to racehorses. "In Finland a horse treated by acupuncture may not be allowed to race for three days after treatment," he said.

Acupuncture is not usually used for the treatment of viral diseases or infections by veterinarians here. "It is used for chronic pain problems which have not responded to other treatments and which can not be resolved with either drugs or surgery," Dr. Klide explained.

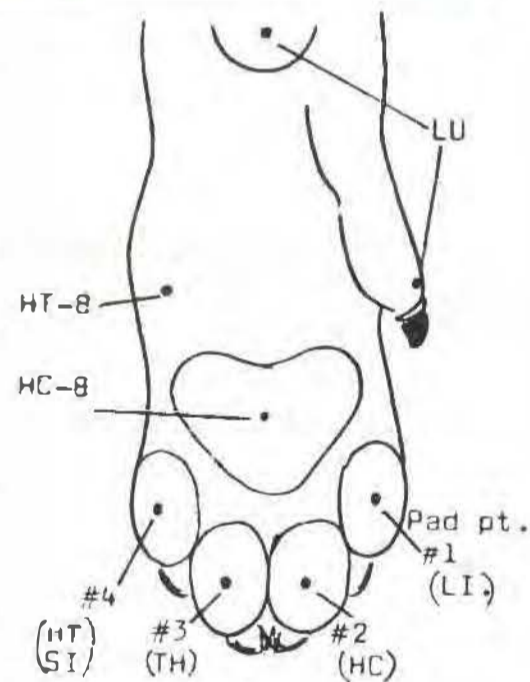
He has an acupuncture clinic at New Bolton Center once a week and also a clinic at VHUP for small animals. "In addition to the dog with the lick granuloma I have treated a number of dogs with epilepsy." These are animals which have not responded to drug treatment. Dr. Klide inserted tiny gold beads beneath the skin at acupuncture points in the head. "This was done just recently and we don't know whether it works, though the owners have reported some improvement in some some cases."

Dr. Klide hopes to see more dogs with chronic problems. He feels that treatment of a large number of animals is necessary to determine why and how acupuncture works. Currently the procedure is looked upon as experimental but Dr. Klide hopes that once scientific data are collected acupuncture will take its place alongside traditional veterinary treatment to become another weapon against pain.

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The acupuncture clinics at New Bolton Center and at VHUP take cases by referral only. Appointments can be made by calling: (215) 444-5800 for New Bolton Center, and (215) 898-5902 for VHUP.

P.S. Susan Gallagher reported that the Doberman pinscher is improving and that, according to its owners, it had not touched the lick granuloma since acupuncture treatment began.



An ancient Chinese art is being used as a therapeutic agent for animal disease.