

MEDICINE

Hot Water Cures Tic

Injections of hot water into the brain are being used safely as a technique for killing the nerve which causes painful tic douloureux—By Faye Marley

► YOUNG SURGEONS the country over are learning a hot water technique of treatment for a sharp-stabbing, lightning-like pain in the face called tic douloureux.

The technique originated by Dr. J. Rudolph Jaeger, professor of neurological surgery, Jefferson Medical College, Philadelphia, replaces the older surgical methods by using injections of hot water that give safe relief from almost unbearable pain.

Dr. Jaeger began treatment some years ago using knife surgery, which quite often left undesirable effects. It was not until 1953 that he began the hot water treatment, a technique he also used successfully with mental patients in the days when frontal lobotomies preceded the tranquilizing drugs.

The operation is widely used throughout the world today. Hundreds of thousands of suffering people have been relieved in this way. Dr. Jaeger performed 470 operations with only one case of temporary facial paralysis, and no deaths.

Although some neurosurgeons use a similar needle, they inject irritating chemicals, either alcohol, carbolic acid or formalin, which sometimes cause harmful after-effects. Those still using the brain surgery technique are causing their patients to undergo an operation of considerable extent and some danger, Dr. Jaeger says.

He puts his patient under a kind of twilight sleep with injections of Pentothal, so he is able to talk with them and give them light pin pricks to determine the state of painlessness in the face into which the needle is being inserted.

The long needle goes into the face a very short distance and proceeds toward the brain between the ear and the eye until it can release the hot water, which is about 160 degrees F. or some 50 degrees under the 212 degree boiling point. The heat kills the offending nerve.

Repeated X-rays are taken during the operation, quickly developed and carefully inspected to make sure that the needle's point has approached the skull opening. The goal is an opening called the foramen ovale where the needle passes through and is removed to be filled with hot water in a pan for reinsertion and discharge into the nerve area called the gasserian ganglion.

Although tic douloureux is predominantly a disease of old age, it can occur earlier, even in children. It is more common in women than in men and occurs more often on the right side of the face. About two percent of cases occur on both sides of the face. It is estimated that 63% of persons affected have the trouble on the right side of the face, with 37% having it on the left.

Drugs cannot cure the ailment, the cause of which is unknown. Many drugs used are especially toxic, even though they are not narcotic. These include stilbamidine,

dilantin and others undergoing experimental trials.

Dr. Jaeger says he has never screened out a patient because of old age infirmities and chronic disability such as heart disease, high blood pressure, multiple sclerosis (many of the cases are afflicted with this demyelinating disease) and other poor risk conditions.

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Heart Murmurs Common

► DO NOT CONDEMN your elementary school child to the sidelines because he has a heart murmur. Most children can exercise in spite of this common cardiac condition, provided the murmur is not caused by a heart-valve weakness, the National Conference on the Medical Aspects of Sports in Philadelphia was told.

"It should be said at the very beginning," noted Dr. Albert S. Hyman of New York, "that every athlete has cardiac problems."

An imbalance of oxygen is produced in the system by vigorous exercise, whether or not the person has a normal heart. Any athlete experiences labored breathing, palpitation and "heart pain" as a result of a physiologic oxygen debt.

A simple test is based on the percentage of recovery of normal breathing and heartbeat after exercise, Dr. Hyman said. Those

who have a low recovery rate are usually poor candidates for any athletic program.

Eight types of cardiovascular disabilities have been found among school and college students. Cardiac murmurs are said to occur in about 60% of all youngsters, but have no clinical significance in many cases.

The well-conditioned athlete with a cardiac condition may be better able to tolerate oxygen debt than a person who has a normal heart but is in poor physical condition, said Dr. Hyman, who is associate clinical professor of medicine-emeritus, New York Medical College. Dr. Hyman is also founder and honorary trustee of the American College of Cardiology.

This optimistic outlook was in contrast to another report, showing that one of every nine boys will have either a concussion, a jammed neck or a pinched nerve during a football season at the University of California at Los Angeles.

Dr. Martin E. Blazina, an orthopedic surgeon and assistant professor of surgery at the UCLA center for health sciences, reported 2,333 injuries recorded in the intercollegiate football program from the fall of 1959 through the spring of 1965.

Of these, 145, or 6.2% were head injuries and 126, or 5.4% were neck injuries.

The helmet does not prevent head injuries altogether, but it appears to prevent serious injuries, Dr. Blazina pointed out.

"Why certain players do not recover from a cerebral concussion without encountering future trouble requires further investigation," he said.

Other speakers emphasized the need for greater medical surveillance of sports training.

The American Medical Association sponsored the conference as a part of its 19th Clinical Convention.

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Hope for Diabetics Seen

► THOUSANDS of young diabetics may some day thank three Boston researchers who have successfully transplanted pancreas tissue into the cheeks of a group of adult hamsters.

The first hamsters to receive the transplants had to be made diabetic for the transplants to "take," reported Dr. Samuel B. Beaser of Harvard Medical School and Boston University at the American Medical Association clinical meeting in Philadelphia.

Later on, however, the use of two sulfonyleurea drugs, tolbutamide and chlorpropamide, enabled healthy hamsters to receive tissue from newborn animals.

The 300,000 adults now taking insulin "would respond equally" to the two drugs, which can be taken orally instead of by injection, Dr. Beaser said. Children and young people, however, respond only to insulin and face years of injections, unless the pancreas transplant or some other discovery provides a cure.

Chlorpropamide appeared to be the more potent of the two drugs in the treatment of diabetes mellitus.

Co-researchers with Dr. Beaser were Drs. I. Alden Macchi and Matthew F. Sak of Boston University.

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Jefferson Hospital

HOT WATER TREATS TIC—Very hot water injected through the needle which the arrow points to kills the painful nerve causing tic douloureux. The treatment was originated by Dr. J. Rudolph Jaeger of Jefferson Medical College.