

Brain Injections Ease Pain in Cancer Victims

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PEBBLE BEACH, March 19. — Terminal cancer patients wracked with pain and raving psychotics in insane asylums can both be aided through a new surgical procedure reported here today.

The technique involves the injection into the forepart of the brain of procaine, a substance generally used as a local anesthetic, and known to most laymen as novocaine.

The author of the paper read before the annual meeting of the Neurosurgical Society of America was Dr. Frank E. Nulsen, of Cleveland, Ohio.

OLDER METHODS.

Until recently there have been two more or less standard methods of relieving intractable pain suffered by cancer patients in the last months of their lives.

One is the so called cordotomy, a severing of the sensory nerve involved high up on the spinal cord. The other is what most surgeons admit is the crudest of all operations, the prefrontal lobotomy, where an ice pick like instrument is used literally to destroy the brain area which registers anxieties.

The cordotomy procedure relieves pain only below the spot where the severing of the nerve takes place—generally high in the neck—and hence has no effect upon the agonies wrought by brain or facial cancers.

ONE BAD RESULT.

Lobotomies are performed both to cancel pain and to relieve the anxieties of schizophrenic patients. The basic trouble with this operation is that it usually causes personality changes in the patient, turning him into a worryless, vegetative state.

The new technique reported by Doctor Nulsen involves the injection of procaine into the brain through a burr hole drilled in the temple.

Injections are made at forty-eight hour intervals and are stopped when the patient reports an end to his pain.

The method does not destroy the brain cells and results in no personality change.

In the case of terminal cancer patients who no longer are relieved by heavy doses of narcotics, the procedure brings complete relief from pain in most cases.

In the case of insane asylum patients it relieves the feeling of terrible anxiety that drives such people "crazy" and also permits them to live a relatively normal life.

ANOTHER PROBLEM.

Another neurosurgeon at the meeting, Dr. Bertram Selverstone, of Tufts College, in Boston, talked about a new method of relieving the pain of vascular headaches, a form of agonizing head pain less common than migraine, but still widespread enough to be a problem.

It is the sort of headache which comes with a sudden boring pain deep in the temple and brings with it reddening of the eyes and clogging of the nostrils.

What causes it nobody knows but its immediate onset is brought about by some physical or chemical change in the arteries which feed the dura, the outer coating of the brain.

Earlier methods of attack consisted of simply severing the involved artery and the sensory nerve which serves it. Fortunately the dura does not need the supply of blood from that artery in order to survive.

NEW TREATMENT.

Doctor Selverstone's new method is more selective. He opens the patient's temple and with minute electric impulses stimulates the suspected nerves and blood vessels.

Those nerve-vessel combinations which the patient reports cause pain are then severed. Doctor Selverstone has followed six patients for from six months to three years.

Two of them have been completely relieved of pain; three are at least 80 per cent better,

a time as four or five minutes. But, through the use of this sort of artificial hibernation, the cell digestive system is so slowed that it can get along without oxygen for almost twice the time without starving to death.

Doctor Welch told the society that he had used hypothermia on six patients for the removal of blood clots in brain blood vessels. Not only was it possible to close off the brain's blood supply for a longer period, but blood pressure was lowered to the point where bleeding at the site of the surgery was cut to a minimum.