in a number of operations—*e. g.*, in the removal of a brain tumor, in the excision of superior maxilla and excision of the tongue—and I see no reason why this blood-saving and time-saving measure should not be taken advantage of in operations upon the ganglion.

1. To sum up in a few words the treatment of trifacial neuralgia I would say that in all incipient cases remove the predisposing cause and administer strychnine hypodermically in heroic doses under proper precautions, and with such adjuvants as have been suggested.

2. In cases that do not respond to this mode of treatment, where the pain is referred to but one branch, recommend the peripheral operation, even though the operation may have to be repeated. It will afford relief, at least temporarily, in every case, and in some cases permanently.

3. When the peripheral operation has failed to afford but temporary relief, even though it may have been properly executed and repeatedly performed, or when from the onset the pain is referred to two or more branches, recourse should be had at once to an intracranial operation: either division of the sensory root or, in certain selected cases, division of the second and third divisions, with interposition of a foreign substance to prevent reunion.

A DEATH DURING GENERAL ANÆSTHESIA WITH ETHYL CHLORIDE.

BY FRANCIS OLCOTT ALLEN, JR., M.D.,
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ON August 11, 1903, there was admitted to the Pennsylvania Hospital a colored man, I. W., aged twenty-eight years, suffering from an incarcerated inguinal hernia. The patient was an epileptic and had had his last convulsion three days before admission. He had had the hernia for three years; it had been easily reducible until ten hours before admission. Since that time he had had pain in the hernia and considerable vomiting, not, however, fecal in character.

Physical examination showed his abdomen greatly distended and tympanitic, and a large, irreducible scrotal hernia on the right side. Temperature was 98.8° F.; pulse small, 110 per minute. Examination was otherwise negative. His general condition was poor.

The hernia could not be reduced, and he was prepared for operation.

Anæsthesia was started with ethyl chloride and progressed satisfactorily until narcosis was approaching (about three or four minutes), when the change to ether was to be made. About fifteen grams of ethyl chloride were used. Just as ether was started the patient gagged and vomited an enormous quantity of an almost clear, watery liquid, which, for a time, spouted from his mouth in a continuous stream, without retching or inspiratory effort. The vomiting could not be controlled and must have lasted, with slight intermissions, for two or three minutes.

When it finally stopped respiration was not resumed, cyanosis was present, and no pulse could be felt. Artificial respiration, with traction on the tongue, was continued for some minutes without effect; there seemed to be no air entering or leaving the lungs. No obstruction could be felt in the throat or trachea. There had been no solid matter in the vomitus. Permission for an autopsy was refused by the patient's friends.

During the last six months ethyl chloride has been used at the Pennsylvania Hospital quite indiscriminately for inducing general anaesthesia for minor operations or as an antecedent to ether for more prolonged narcosis. The results have been generally satisfactory. In some cases there has been struggling; in one child an epileptiform convulsion occurred during the induction of anaesthesia; in no case, except the one above reported, have there been alarming cardiac or respiratory symptoms. The method has been to spray the chloride of ethyl upon gauze held over the patient's nose and mouth, and the number of such anaesthetizations has been about one hundred.

This case is not reported to condemn ethyl chloride or emphasize its dangers, for it can hardly be held entirely responsible for the fatality; the result might have been the same with any other anaesthetic. The statistics of general anaesthesia with ethyl chloride are given in the *Journal of the American Medical Association* for November 8, 1902, by Dr. M. W. Ware, who collected 12,436 cases with one *bona fide* death; and in the *Lancet* for April 4, 1903, by Dr. W. J. McCardie, who mentions 16,000 cases, collected by Seitz, with one death.

A CASE OF INFECTION OF THE EPIDIDYMIS AND TUNICA VAGINALIS BY THE FRIEDLÄNDER BACILLUS.

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ALTHOUGH the literature abounds in observations of infections by the Friedländer bacillus, the number of cases arising in the genito-urinary tract is very small. The occurrence of the organism in the respiratory tract, as a causative factor in pneumonia, pleurisy, and empyema is well known, and its etiological significance in certain cases of otitis media, meningitis, cholecystitis, and intestinal infection has been established.

Etienne, in an exhaustive article comprising eighty-three cases collected from the literature, describes instances of primary infection in almost every organ of the body. In the genito-urinary tract he describes lesions secondary to a septicæmia.