

gauze electrode between the shoulders. When puncture is resorted to, one should not be content with a current of less than 50 milliamperes applied for eight or ten minutes, and care should be taken to observe antiseptic precautions, and to see that the portion of the needle outside of the capsule is thoroughly insulated. In his experience, pure cystic goitres had proved to be the most amenable to treatment. His method was to aspirate the contents of the cyst, inject a hot solution of chloride of sodium (1 drachm to the ounce—4 to 31 cubic centimetres), apply through a trocar a current of from 50 to 100 milliamperes for ten minutes, and then withdraw the salt solution. It should be remembered that puncture alone involves some risk, and that change of residence and attention to hygiene are important adjuncts to all forms of treatment.

Dr. Robert Newman, of New York, referred to a method of treatment employed by Dr Watkins, of New York City, with good results. A needle was connected with each pole of the battery, and currents of only from  $\frac{1}{4}$  to  $\frac{1}{2}$  a milliampere were found to answer.

Dr. Rockwell objected to the strong currents advised by Dr. Dickson.

Dr. Morton said the object of using these strong currents was to secure adhesion of the cyst-walls, but the same object could be attained with a current of only 5 or 10 milliamperes by calling to our aid metallic electrolysis.—*Universal Medical Journal*.

---

## Progress of Science.

---

### THE TREATMENT OF SCIATICA.

Græme Hammond, in discussing the treatment of sciatica in the *Post-Graduate* for September, 1894, states that the pain of sciatica varies in accordance with the severity of the disease. In mild cases, from 10 to 15 grains of phenacetin will afford prompt relief, but in the majority of cases the anæsthetic properties of this drug fall far below what the patient requires. If the pain is moderately severe or intense, it is better to inject morphine. Enough morphine should be given in one dose, if possible, to thoroughly arrest the pain. It has been claimed that the morphine should be injected directly into the sciatic nerve, because it not only relieves pain, but also exerts a beneficial effect upon the inflammatory process. There is no proof that morphine possesses any such power. The writer has injected it repeatedly into the sciatic nerve in many cases, but never observed that it had any antiphlogistic properties. Puncturing the sheath of the nerve

in a number of places by piercing it with a needle has in some instances afforded relief. This is accomplished by permitting the serum which is poured out between the sheath and the nerve to escape through the puncture made by the needle, thus relieving the pressure and consequently the pain.

Having made the patient comfortable, the neuritis is best treated in the following manner: Absolute rest of the afflicted leg cannot be too strongly advocated. Mild cases of sciatica sometimes get well in spite of this rule being flagrantly violated, but the course of every case will be shortened, and, in many instances, the disease will be prevented from becoming chronic by the rule of absolute rest being strictly enforced. The patient should not only be confined to bed, but the leg must be made almost immovable by being confined in a splint. The author prefers the old-fashioned hip splint, as recommended by Weir Mitchell. A piece of board about three inches wide, and long enough to reach from the axilla to the sole of the foot, should be properly covered, and then applied by attaching it to the body by a few turns of a bandage, and in the same manner to the leg from the knee to the foot and from the knee to the hip.

Having thus secured almost perfect rest for the inflamed nerve, the next most important feature of the treatment is the application of heat. The most common seat of the neuritis is in the upper part of the nerve, from its exit from the pelvis to the middle third of the thigh. Hot-water bags should, therefore, be placed under the back of the thigh and kept there continuously until all signs of inflammation have ceased; the constant electric current is also very serviceable in relieving pain. In almost all cases patients will speak of the improvement they feel after each application. A large electrode, fully the size of the foot, should be fastened to the sole of the foot by straps or elastic bands. Another large electrode, fully six inches square, should be placed under the hip while the patient is reclining. This electrode should be connected with the positive pole, the one on the foot with the negative pole, and the current should then be gradually turned on, being careful not to break the circuit until the patient is receiving enough to give rise to a moderate sensation of burning. The current may then be allowed to flow uninterrupted for about five minutes, and should be gradually diminished until it is taken off entirely. This ought to be repeated daily, and in severe cases it can be used advantageously twice a day. By these three methods—absolute rest, continuous application of heat, and daily applications of galvanism—the most severe acute cases will promptly yield, the average cases not lasting longer than seven or eight days. At the end of that time treatment can be discontinued,