ELECTRICITY IN MODERN MEDICINE.

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Since ionic medication brings as potent a quantity of a drug as possible to act on a localized diseased part its merits seem apparent. In acute specific diseases medicine taken orally permeates the whole system and combats the specific virus which, as in rheumatic fever, is generalized. In chronic diseases, where the virus in some form is localized and probably in an exaggerated and resistant state, the system must be saturated with the drug and for so long a period that such administration is harmful and dangerous.

With a knowledge of what element enters at the positive pole, and what at the negative, any localized area can have its cellular tissue saturated with ions of a drug. In such affections as neuritis, chronic synovitis, sciatica, etc., I found ionization act most satisfactorily. In sciatica a pad of lint moistened with a solution of sodium salicylate is placed over the affected area. On this a carbon terminal connected to the negative pole of a battery of about twelve volts or more is placed.

The positive or neutral pole should be of a large size and covered with lint moistened with water so as to distribute the current and avoid any local action on the skin. This is placed on an unaffected part of the body near the part under treatment. When connexion is made a burning sensation is felt by the patient, which is accentuated on making or breaking the current. The application may be continued daily till the skin under the negative pole blisters. As the skin resistance to an electrical current is high the current passing through the body is small.

A more direct way of dealing with any area is the following, which I tried on one occasion with satisfactory results. A large bore aspiration needle was connected with a rubber tube filled with a weak solution of sodium salicylate, five grains to two ounces. The sciatic nerve was pierced with the needle and the solution held about one foot above the patient. The negative pole of two cells in series was connected with the needle. The positive pole was moved about on the skin over the region. The pressure of the fluid in the needle forced some of the solution into the sheath of the nerve, which in itself has a curative action, while the continuous current saturated the area with salicylate ions. The tissue around the negative pole has high conductivity and care must be taken not to corrode this by too strong a current.

Ionization of a primary syphilitic sore with mercury before generalization of the spirochetes in the system may prove more efficacious than excision, which does not eradicate all the virus. The bladder or urethra may with facility be ionized through a rubber catheter with a metal director.