

will only be, whether the inflammatory reaction can take place in the desired way, or whether the fungus-vegetations are so vigorous that they push aside the tissue cells and prohibit the inception of the reaction.

From this point of view Buchner attempts to answer the interesting question how it is that immunity from an infectious disease is conferred by a previous attack. The theories hitherto proposed he considers insufficient; he pictures to himself the process as follows:—When pathogenic fungi get in anyway into the circulation, they are carried by the blood into the different capillary plexuses, where they remain, endeavouring in struggle with the tissue cells to effect a settlement. The different kinds of tissues will, however, conduct themselves differently in relation to any particular fungus. Most fungi will be able only to survive the competition in one kind of tissue, but will perish in all others. In this one tissue the reactive inflammation will develop itself. This leaves behind it a permanent alteration which prevents a second invasion of fungi; and as the organ in question is the only possible channel of entrance for them, the purely local alteration is thus the cause of the immunity of the whole organism.

Buchner's reviewer (G. Kempner, Berlin) points out that many known facts range themselves against this explanation (*e.g.*, the tendency towards recurrence of erysipelas), but considers Buchner's suggestion as to inflammation protecting tissues against the invasion of bacteria, well worthy of attention and experimental investigation.

Buchner believes that nature's curative process may be imitated by the administration of arsenic, which in small repeated doses produces the first stage of inflammation in the tissue cells, *i.e.*, increased nutrition and activity, in which condition they are better fitted to engage in a struggle with invading bacteria. Buchner has found arsenic of the greatest service in tuberculosis; he gives daily 10 mg.* of a watery solution of acidum arseniosum 1 to 2,000, attaining this dose in a few days. He believes the therapeutic value of arsenic in malaria, skin diseases, &c., to be also due to its property of exciting inflammation.

*10 mg. = 1.7 gr

"One science only will one genius fit;
So vast is art, so narrow human wit."

TREATMENT OF HYDROCELE AND NÆVUS.

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I find hydrocele of the tumia vaginalis testis a comparatively common disease, and being very annoying on account of the inconvenience and deformity which it entails on the sufferer, it is desirable to have a quick, safe and efficient cure.

Several methods have been in use at different times and places, such as incision, excision, actual cautery, seton, and injection of the sac with various liquids after evacuating the fluid.

I have tried incision, the injection of iodine after tapping, the seton without first evacuating the contents, as recommended by Henry Smith, and the seton after evacuation of the contents, as recommended by Prof. Gross, of Philadelphia.

By each of the foregoing methods I have secured radical cures, but with varying degrees of trouble, the last one having proved, in my hands, the most speedy and certain. I have operated on hydroceles containing very various quantities of fluid, the greatest being 3xxviii., and the smallest from 3iii.-iv., and I have no reason yet to substitute any other method for that of the seton *after tapping*.

In operating to cure a very large one, I should first simply tap and evacuate the contents, and allow the sac time to partially fill again before ultimately tapping and inserting the seton. The reason for this is obvious. The method of using the seton which I am now advocating, is best given in Dr. Gross' own words: "The operation which I prefer to every other, both on account of its simplicity, its freedom from danger, and its never-failing certainty, is performed in the same manner as by injection, except that the puncture is made a little lower down. After all the water has escaped, the canula is pushed on towards the superior part of the scrotum, where a counter-aperture is made by the re-introduction of the perforator. The instrument being withdrawn, a piece of braid, or narrow strip of muslin is passed through the canula by means of an eyed probe. The operation is finished by removing the canula, and tying the ends of the seton loosely in front of the scrotum." . . . "Let the seton remain for twenty-four to forty-eight hours, or until the scrotum is quite hard, and at least one-fourth as large as be-