

prolonged exposure to heat or cold, diuretic medicines, drastic cathartics, hysteria, neuralgic diathesis, or disease of neighboring organs, as hæmorrhoids or prolapsus-uteri, is not likely to be mistaken for cystitis; for the attack is usually transitory, perhaps periodical, and the painful symptoms are the only ones observed.

In regard to treatment of the acute form in its early stage, the indications are all in the direction of the antiphlogistic. Rest absolute for the patient, and as complete rest as can be secured for the inflamed organ—that is, saline cathartics to lessen the blood current and urinary flow—opiate suppositories to allay irritation, hot fomentations and counter-irritants, excepting the cantharidal; demulcent drinks, in moderately small quantities, and milk diet. Hot baths are very serviceable, and, if the urethra and neck of the bladder are not so sensitive as to make it difficult and very painful, it is better to anticipate the excessive contraction caused by distention by the use of the catheter, and for obvious reasons a soft rubber is the preferable: for, as has been said, the spasmodic contraction induces hyperæmia of the mucus lining, causes still further perversion of its secreting function and so aggravates the malady.

As the urine is often highly acid in the early stage, the alkalies would be indicated: and in the later stages benzoic acid to counteract alkalinity: various specifics have been praised— notably buchu, hyoscyamus, uva ursi, lupulin, cubebs, copaiba, and belladonna. Gross thinks copaiba in small and often repeated doses one of the best, if not the best remedy; and, as he thinks that a combination of remedies in this particular disease better than any one individually, he combines the copaiba with, I think, uva ursi and hyoscyamus.

I found in one case the capsules of copaiba, cubebs and santal wood apparently act well. I believe this fondness for copaiba did not originate with Gross, for Sir Astley Cooper used it extensively for the same disease.

Should the collection of mucus and pus be so great as to interfere with free urination, or should there be enlarged prostate with consequent permanency in the depression behind it, it would be necessary to use irrigations, which will be mentioned in connection with the chronic form of the disease. Of course when inflammation of the bladder is a result of other diseases, the cause

must be removed if possible; otherwise the cystitis remains.

Time will not permit of discussing the chronic form of the disease, further than to say, that of course it is characterized by less pain: enormous quantities of sediment, consisting of ammonio-magnesian phosphates, mucus, pus, phosphate of lime, and often urate of ammonia; it is apt to lead to extensive ulceration, when it is considered incurable; may be lighted up into the acute form, when there will occur more pain and less sediment until the acute stage passes off again; and is liable to produce hypertrophy of the bladder, seldom concentric, ordinarily eccentric. It may last for many years in a mild form occasioning only a little inconvenience; or it may, by invading the kidneys or by the constant discharge and pain, so undermine the strength as to lead to a fatal termination.

Prof. Berkeley Hill says the chronic form is eminently curable if the cause be removed and the kidneys are not affected. Even if the cause remain and the bladder be free from ulceration, the affection may be palliated sufficiently to prevent suffering and the shortening of life—a pretty sweeping statement when the long list of remedies is made up, each of which has a sponsor who vouches for its infallibility.

The diet of course must be unirritating, and proper rest must be enforced. The same rules respecting the use of the catheter will apply as in the acute disease, and I conclude from the published convictions of many and from my own experience, that irrigation properly conducted is of more service than internal medication.

Of the remedies recommended to be taken are, in addition to those already mentioned, tannin, nutgalls, tincture of the chloride of iron, Venice turpentine, compound tincture of benzoin, benzoic acid, and acetous extract of colchicum; this last indicated in the gouty habit. Care should be observed in the administration of belladonna, especially to old subjects, as an excess of the drug is apt to paralyze the detrusor urinæ; thus, while allaying irritation, doing more harm than good.

Irrigation is best done by gravity—a syringe is uncertain in its force, while gravity is constant—and may be simple or medicated. I have tried several of the remedies for irrigation and have thought that boiled water was followed by less