

may be furnished by the condition of the kidneys. Chronic interstitial nephritis, so insidious in its onset that the patient himself has never received any warning of its presence, is very apt to be revealed by the excessive effect of a single moderate dose of an opiate. The tendency to uræmia seems to be favored, if manifested before, or even to be developed, when not previously indicated, by the use of opium. Even in peritonitis, where there usually exists so remarkable a tolerance for this drug, the ill effects have not been wanting; so that patients suffering from peritonitis, occurring in the course of chronic Bright's disease, have quickly passed into a state of uræmic coma, with no symptoms of narcotism, and have died comatose, without rallying from the first attack.

My preference for morphine has always been strong, and I am in the habit of giving it in the form of a standard solution in cherry-laurel water, one grain to the drachm. Of this solution a sixth, fourth, third, or half can easily be given, and the cherry-laurel water acts in part as a gastric sedative, preventing the tendency to vomit which morphine produces in some patients. Where this tendency nevertheless exists I have given the morphine by suppositories or have substituted codeine, which must be given in doses four times greater than those of morphine, but is easy to administer, and little likely to produce gastric derangement.

With symptoms that from the beginning are chiefly local, it is but natural that local measures should have early occupied a prominent place in treatment. The local application of leeches, the use of blisters and other powerful counter-irritants have had their place and are now, happily, no longer relied upon. Not so with topical applications intended, by their temperature, to influence the course of the inflammation. Cold applications, hot applications, turpentine stupes, flaxseed or other poultices have had their champions, and are still very commonly used. It is sometimes difficult to decide what form of application may be best suited to the individual case, but it is a safe rule, in every instance, to consult the comfort of the patient, and to let that influence the selection of hot or cold applications. All of these applications are open to one serious objection, namely, that they require to be constantly changed—the cold applications, lest they get too hot, the warm, lest they grow too cold; and in these frequent manipulations the tender abdomen is liable to fresh injury.

It was formerly the practice in acute peritonitis, when mercury stood high in favor as the preliminary step in all kinds of treatment, to apply freely mercurial ointment to the abdomen, the ointment being spread upon flannel or some other soft fabric and left in contact with the abdomen. In the reaction following the excessive use of mercury the drug in all its forms was practically banished from the materia medi-

ca, save for a few specific purposes, and this use of it in peritonitis was banished with the rest. But the pendulum has swung a little too far in the other direction, and, I think, we must again return to many of the things that were found useful by our fathers in medicine. For the last three years every case that has come under my care, in hospital or private practice, has been treated by the free application of mercurial ointment over the whole abdomen. It has promptly relieved the feeling of rigidity and painful distention; the immediate effect has been cooling and pleasant to the patients and the tympanites has subsided as quickly as after any other local application. It constitutes a dressing that easily adapts itself to the shape of the abdomen; it does not annoy by its weight; there is no wetting of the bedclothes, and the patient is not disturbed for its frequent removal, the ointment being renewed but twice in twenty-four hours. In all of these particulars it possesses decided advantages over other local applications. The mercury is evidently absorbed very slowly, for I have yet to see a case of ptyalism from its use; and in many instances it has remained in contact with the skin for two or three weeks.

Of the individual symptoms but two require especial mention in connection with the treatment, namely, the vomiting and tympanites. The former, which frequently ushers in the whole train of symptoms, is often so severe at the outset as to suggest intestinal obstruction; yet it is promptly controlled, as a rule, by large doses of opium. When occurring later in the disease, cracked ice taken freely into the mouth, small quantities of iced champagne, alone or in combination with aromatic spirit of ammonia, or half-drop doses of creasote in emulsion of sweet almonds, usually succeeds in controlling the trouble. Champagne has the advantage of being a stimulant and at the same time a gastric sedative; it is readily taken by children as well as by adults, and its use can be continued through the entire course of the disease.

Tympanites is always present to a greater or less degree but rarely, except in peritonitis of septic origin, and especially in those forms incident to the puerperal period, does it become excessive. The abdominal distention may, however, attain such proportions that the upward pressure of the diaphragm becomes a dangerous impediment to the circulation and respiration, and calls for immediate relief. A rectal tube carried high into the bowel, and left there, may accomplish all that is necessary; but this result cannot be confidently expected, since the gaseous distention is found mainly in the small intestine. Under these circumstances it has been recommended to puncture the bowel with a hypodermic or aspirator needle through the abdominal wall. I cannot regard such a plan at wholly devoid of danger, and should resort to it