

for acute obstruction of the bowels, yet there are several others which resemble it more or less closely, but which can be usually easily enough distinguished from it by the previous history of the case, and by the presence of some well-known diagnostic symptom. It must suffice merely to enumerate in this connection the following:—hepatic, renal, or lead colic, cases of acute irritant poisoning by arsenic, or some similarly acting substance, acute meningitis, etc. Strangulated hernia is of course always to be thought of, and search made for any of its various forms.

Having made a diagnosis of intestinal obstruction, let us now consider the kind of *treatment* applicable to the disease in its different forms; and first we will pass in review a few of the non-operative measures which may be resorted to in dealing with such cases. Opiates undoubtedly occupy a prominent position, and are of much service both in relieving pain and retarding the symptoms of collapse, while at the same time they tend to promote a cure by preventing the irregular peristaltic action of the bowels, which acts so potently both in the production and continuance of many attacks of the disease. They would be especially useful in acute intussusception and volvulus. Next come enemata and insufflation of air. The enema generally employed is simple warm water, to which is sometimes added soap, ox-gall, or oil to aid in softening and rendering fluid any fecal mass that may be present in the colon. It has been affirmed that injections cannot be made to pass beyond the ileo-cæcal valve, and would therefore be useless in affections of the bowel above that point; but it is now we think pretty generally admitted that they do often overcome this barrier, especially if the patient be well under the influence of an opiate or anæsthetic. In order to render the enema more effective, it is often advisable to introduce a long flexible tube, such as that attached to a stomach pump. Great care will be required to pass this successfully, for it will otherwise often coil itself up in the rectum, instead of moving on into the colon. We have derived on many occasions much benefit in making this manœuvre, by occasionally throwing in a few ounces of water, so as to distend the gut, and thus lessen the chances of the end of tube bringing up against its walls. Also we think a cork-screw like motion will often materially assist it in its

onward progress. The cases most likely to be relieved by enemata are intussusception and obstruction from faeces; also perhaps some cases of volvulus, where indigestible articles of diet have given rise to the disease. Insufflation of air is said to have proved successful in reducing an intussusception after enemata of warm water have failed. In order to prevent the escape of the air or fluid where large quantities are injected, an obturator of cotton rag or an inflated rubber ring may be used. Aperients are to be condemned in all cases of acute or subacute obstruction. They may however be employed in chronic fecal accumulations, although it must be seldom even in these that enemata will not prove as good and a safer remedy. Recently, in Germany, washing out of the stomach and small intestine by means of the stomach-pump or by syphon-action, has been employed in obstruction cases. It is claimed that by thus emptying the distended alimentary canal above the seat of disease, the bowel will be placed in a condition more favorable for spontaneous relief.

Metallic mercury, which at one time was held in high repute in the treatment of obstruction, and subsequently fell into disuse, has again been extolled of late in France as a remedy, especially in cases of stercoraceous accumulations. It is not supposed to act simply by its weight, but is thought to insinuate itself in a condition of fine division between the intestinal wall and the obstructing mass, and thus helps to loosen the hold of the latter and consequently aids in its expulsion. In several such cases M. Matignon reports prompt relief from its use, after purges and enemata had failed to dislodge the offending substance. The doses administered varied from two to eight ounces, and were in most cases several times repeated. In one case nearly 2 lbs. were taken altogether and with success. No ill effects were ever observed from the remedy. Massage and electricity have also been used with advantage in some of these cases, but they will probably be found rather to occupy the position of adjuvants to other methods of treatment than otherwise. Indeed, manipulation of the tumor of an intussusception materially aids an enema or insufflation in bringing about reduction; and it is easy to understand that in cases of fecal accumulation when no inflammation is present, it may also be of great service.