

## CHAPTER VIII.

## DISEASES OF THE DIGESTIVE SYSTEM.—Section II.

**Contents.**—Enteralgia—Constipation—Acute and chronic diarrhoea (various forms): Intestinal catarrh, and enteritis, &c.—Dysentery—Ileus, or obstruction of the bowels: Intussusception—Ulcers of the intestine, and cancer—Intestinal parasites—Acute and chronic peritonitis—Perityphlitis, and inflammation of the appendix vermiformis (Appendicitis)—Tabes mesenterica—*Differential diagnosis of intestinal diseases*—Intestinal hæmorrhage—Ascites.

**Enteralgia, or colic**, is a very common functional disorder, and it is of the nature of a neurosis like gastralgia. It is caused by improper food (indigestible); impaction of hardened fæces; flatulent distention of the bowels; and exposure to cold. Hysterical and neurotic persons are liable to have attacks of colic; and the disease is a symptom associated with various constitutional states—as the malarial and syphilitic—and with metallic poisoning, especially lead.

The twisting pains about the umbilicus may begin suddenly and violently, producing symptoms of collapse; but it is more usual to have warnings in the shape of small griping pains in the abdomen, gradually increasing in intensity until the patient feels compelled to "double up." Pressure diminishes the pain, although after a time the abdomen may be tender. The colic is usually relieved by passage of the bowels. There is frequent desire to micturate, and constipation usually co-exists with enteralgia—especially in lead-poisoning. The abdomen is distended when the cause is flatulence. The temperature is generally normal, or sub-normal, but sometimes may be raised a degree or so.

The *prognosis* is favourable in the simple forms.

The *treatment* depends upon the cause. Morphia is indicated in the first place; and a laxative as soon as possible. Castor oil is soothing to the bowel and safest. It may be given with twenty drops of laudanum in cases of less urgency. In children, a few drops of paregoric, with one drop of essence of peppermint, in sugar and water, will be found serviceable. Quinine—in five grain doses, repeated every two hours till fifteen or twenty grains have been given—is useful treatment in neuralgic forms. Iodide of potassium must be given in large doses for lead poisoning, and continued in smaller doses for a lengthened period. Enemata of asafœtida may be tried; and arsenic is useful for the chronic cases. It is well to use hot poultices, or turpentine stupes, in cases of acute colic.

They seem to relieve, and cannot do harm, while often a case of apparent enteralgia proves ultimately to be a much more serious affection (see *Diagnosis*, p. 182).

**Constipation**—when simple—is a state of defective alvine evacuation. In most adults the bowels are moved once daily; in some others, twice; and often again, only on alternate days (and even longer), and yet there is no interference apparently with the ordinary health. The *causes* of constipation are deficient secretion of the intestinal tract, liver, and pancreas; a failure of the peristaltic movement of the bowel from loss of tone in the muscular layer, as occurs in people of sedentary habits, and in aged persons; and certain states of the nervous system—as melancholia, spinal disease, &c., and notably by the action of lead. Abnormal conditions of the mucous membrane of the intestinal canal, old adhesions of, or pressure upon, the bowel, diseases of the liver and pancreas, anæmia, improper food, and hard waters are common causes of constipation.

The *symptoms* associated with constipation are those which are common to dyspepsia—especially the *hepatic* form. Dulness may be made out, in extreme cases, in the line of the descending colon, and at the sigmoid flexure. Defecation is often extremely painful, and blood, mucus, &c., may be discharged with the fæces. The *sphincter ani* may suffer from the propulsive efforts, and the mucous membrane may become cracked and fissured. Hæmorrhoids are very common; and in severe cases of constipation, varicosity of the lower limbs, pelvic congestions with uterine disorders, and sciatica, are frequently induced. The fæcal matter is often scybalous, and sometimes there is an alternate condition of constipation and diarrhoea. The latter condition may exist along with a considerable accumulation of fæcal matter in the bowel, a central canal being sometimes established through the mass. In chronic cases nutrition is impaired, and the skin becomes dry and subject to eczema, erythema, psoriasis, &c. Headache and vertigo are common consequences.

The *treatment* will depend upon the cause. If the stools show a deficient secretion of bile, liver stimulants should be prescribed—calomel, iridin, euonymin, podophyllin, or R 45. Phosphate of soda is also recommended. Paresis of the bowel is best treated by strychnine or nux vomica, with belladonna and iron (R 46, 47). Electricity is useful—one electrode being placed in the rectum, and the other being passed over the abdomen. Kneading the abdomen should be tried first. Two or more dessert-spoonfuls of the liquid extract of cascara sagrada with glycerine (equal parts) is a very useful remedy, especially with aged persons. Cascara sagrada is one of the rare purgative medicines, the use of which diminishes the need for it—the doses, consequently, may be gradually reduced. It may be given in small doses as a bowel tonic. Constipation is a symptom of many diseases, and it requires attention along with the treatment of these—*e.g.*, lead poisoning, cirrhosis of the liver, certain forms of dyspepsia, gastric catarrh, &c., &c.

The regulation of the diet in simple functional constipation is highly important. Wheaten or brown bread, oatmeal, fresh vegetables, and fruit are all indicated. Regular evacuation is to be inculcated, and exercise is to be taken. Plethoric individuals may use the alkaline and aperient mineral waters in the morning; but the regular practice of taking strong purgative medicines should be condemned. Enemata are necessary in severe cases.

**Diarrhoea.**—*Acute and Chronic.* **Intestinal Catarrh and Enteritis.**—The *acute* form of diarrhoea may arise from a morbid state of the mucous membrane of the intestine (catarrh), or it may be the result of increased secretion, or peristaltic action of the bowels. Acute diarrhoea may be excited by exposure to cold, errors in diet, and by impure drinking water; or it may be due to the development of poisons (microbic) from putrefaction of imperfectly digested proteids; or it may arise from mental causes. The septic forms seem to be infective.

*Chronic* diarrhoea may be established after prolonged exposure to one or other of the causes above mentioned. It is a common disease in hot countries, and especially in China, where it is known as sprue or "white flux." Diarrhoea occurs as a concomitant symptom of severe organic disease, as in typhoid and puerperal fevers, dysentery, &c.; and in the tubercular ulceration and waxy disease associated with phthisis. Sometimes ulcerating malignant disease of the intestines set up diarrhoea, but this is a somewhat rare condition. Diarrhoea may also be an effect of organic disease elsewhere. It is common in heart disease, and in Bright's disease, in which, if not excessive, attempts should not be too readily made to check it, as it is often nature's method of relieving the system of *materies morbi*.

The *catarrhal condition of the intestines* may especially affect certain parts, and hence the names, *duodenitis, ileitis, colitis, typhlitis*, and *proctitis* (*catarrh of the rectum*). The *pathological* changes consist of hyperæmia, followed by over-growth and desquamation of the epithelium, in the acute forms; and in the chronic forms, the changes are similar, but the mucous membranes are more thickened, ulcerated, and of a slaty colour, and they are covered with tenacious mucus and purulent matter. The epithelial cells are cloudy, and are advanced in fatty degeneration. The solitary follicles are enlarged. In *typhlitis* the catarrhal changes are similar; but the cause is usually the presence of a foreign body (hardened faecal matter generally). The importance of this condition lies almost wholly with the localised inflammations (*perityphlitis* and *appendicitis*) which may follow. (See p. 180.) In the chronic forms, thickening and stenosis at the ileo-cæcal valve may occur. In *enteritis* the inflammatory changes are associated with the deposit upon the mucous membrane of a thick, dense, grey-white deposit or membrane, sometimes firmly adherent, and afterwards thrown off in casts or shreds.

**The Symptoms.**—Simple uncomplicated cases of diarrhoea are

too familiar to need description. In infants, the stools are often green and acid, and the buttocks are frequently red and excoriated. In children and adults "English cholera" is a common complaint during the fruit seasons. In some cases the stools approach to the "rice-water" appearance which is characteristic of true cholera. "Choleraic diarrhoea" is a special form septic in origin (summer diarrhoea). In the very young, simple diarrhoea is a dangerous complaint, and when there are signs of depression, coldness of the body, sinking in of the eyes, and fontanelles, a fatal result may shortly be expected.

[In *duodenitis*, diarrhoea is *not* the rule, and often there is constipation. Jaundice is a prominent symptom, owing to obstruction of the bile duct with catarrhal products. Pain and soreness in the right hypochondriac and umbilical regions—about three hours after food—is always complained of. The other symptoms are as described under hepatic dyspepsia.]

*Ileitis* and *colitis* have diarrhoea as the prominent symptom, with pain and tenderness over the affected parts. The stools have a yellow or green colour, and they are very frequent. In severe cases they may be like the "rice-water" discharges of cholera. Flatulence, borborygmi, and colicky pains are always present in the chronic forms of intestinal catarrh. There is great emaciation, which in children may be very rapid and the case may terminate fatally after only a few hours' illness.

In *acute proctitis*, or catarrh of the rectum, there is uneasiness or burning pain in the rectum, with *tenesmus*, the pain radiating to the hips and back. The mucous membrane is often prolapsed, and the bladder sympathises with the rectum in its efforts, creating a constant desire to micturate. The colon above the sigmoid flexure is often impacted with fæces, and hard scybala from time to time are passed. The surrounding tissues often become inflamed (*periproctitis*), and this may lead to the formation of an abscess. The *chronic* form of proctitis has similar symptoms, but there is more *débris* and mucus in the stools, and less pain. An irritability or prolapse of the sigmoid flexure into the rectum, is sometimes a cause of diarrhoea in adults.

*Enteritis* is characterised by distention of the abdomen and great tenderness at the outset. There is no fever; but colicky pains are very frequent and they recur from time to time. Soon a state of *tenesmus* is induced, and a diarrhoea begins, with severe straining, which ultimately results in the passage of casts of membrane, when great relief is experienced. There is generally much emaciation and debility, and the digestive functions are much disordered. Acidity, ulcers of the mouth, and a red coated *irritable* tongue are usually present. The course of enteritis is irregular. A case may last three or four weeks and recover; or it may become more or less chronic.

The **treatment** of a symptomatic affection like diarrhoea, requires a careful consideration of the cause. In all cases of diarrhoea, whatever the cause, bland and non-irritating food is

necessary. Milk with lime water, or milk boiled with rice and then strained, barley water, weak tea and toast, light milk puddings, and later, fish and chicken—is the diet indicated. When diarrhoea is the result of a cold, ten or fifteen minim doses of laudanum may be given every three or four hours, and the patient should at the same time keep his bed. If it should be the result of irritating materials in the bowel, and accompanied by griping pains, castor oil with twenty drops of laudanum is the most efficient remedy. Poultices may be applied to the abdomen if the pains be acute. When diarrhoea is the result of impure drinking-water, or when it arises from mental causes, astringent and sedative mixtures may be given (R 48), and the cause removed if possible. The microbic forms of diarrhoea should be treated by mercurial antiseptics, and by frequent and rapid changes in the diet (*Brunton*). Diarrhoea associated with organic disease is considered elsewhere. It should be noted, however, that opiates must be given very guardedly—if at all—in cases of diarrhoea occurring in the course of Bright's disease. The chronic forms of diarrhoea (simple) require astringent treatment—bismuth, opium, and iron being the usual remedies given.

With infants, R 49 is useful when urgent astringent action is necessary. A powder may be given of bismuth, chalk, and mercury (R 50) when the cause is gastro-intestinal catarrh. In such cases, if the child be bottle fed, absolute cleanliness of the feeding apparatus must be inculcated. A change of milk is beneficial; and a pinch of bicarbonate of soda in each bottle is of value. Attention must be paid to the proper dilution of the milk according to the age. In severe forms of diarrhoea, children should be dieted on freshly-made whey and barley water, chicken, or weak veal broth.

All the forms of intestinal catarrh—except *duodenitis* which is considered with gastric catarrh and hepatic dyspepsia—are treated upon the same lines. Ileitis, and colitis, simple uncomplicated typhlitis, and enteritis, all require astringent remedies, the diarrhoea being the prominent symptom. Dilute sulphuric acid, opium, lead and opium or copper pills, bismuth and chalk mixtures, and sometimes alkalies, are all much used (R 51, 52, 48). Regulation of the diet, as before mentioned, is highly important. Bismuth is best for children. Arsenic and opium—both in minute doses, and frequently repeated—is a useful combination in the more chronic states (in adults). The more serious form of typhlitis, with perityphlitis, is considered as a separate disease. In catarrh of the rectum (proctitis) the bowels should be moved freely either by the use of enemata or by a dose of Epsom salts—it being highly important to clear the colon. Afterwards, the astringent treatment is commenced, and emollient enemata (warm chamomile and opium infusions, starch or oil) or morphia suppositories, must be used. Morphia may also be given hypodermically. Leeches to the margin of the anus will relieve the very acute cases. In the chronic forms, tannin, or nitrate of silver (ten grains to the ounce) may be applied or injected *per rectum*. Enemata of hot water give

great relief. The bowels should be regulated, and as the patient is usually run down, cod-liver oil and a nutritious diet are necessary.

**Dysentery.**—The pathological changes may be of a *catarrhal* or *fibrinous* character. In the former there is first an intense but superficial hyperæmia of the mucous membrane of the bowel, limited, it may be, to the rectum, sigmoid flexure, or cæcum, but often involving the whole of the large intestine. The congestion extends to the deeper submucous connective tissue, which becomes greatly thickened. There is much mucus thrown out but it is not very adherent. The follicles are enlarged and the mucous membrane softens and disintegrates, throwing off shreds and leaving rugged portions attached. It is a rapid necrosis produced by the burrowing pus cells within the intestine. Should the parts recover, cicatrices are formed. In the *fibrinous* or diphtheritic form, the initial hyperæmia is universal and deep, and there are extravasations of blood, which infiltrate the whole of the tissues. A fibrinous exudation is poured out upon the surface of the mucous membrane, which becomes dense and unyielding. Gangrene is the ultimate result, if the case proceed further. The membrane then becomes detached in patches and casts, leaving a raw-looking ulcer to heal by cicatrization; but this can only be when the gangrene has been very limited.

The subsequent contractions of the cicatrices may lead to narrowing of the bowel, and severe ulcerations may penetrate to the peritoneum and end in perforation. The mesenteric glands are enlarged, and they may become purulent. The liver is often affected in the same way, and large abscesses may form in its substance. The two forms, catarrhal and fibrinous, may be present together in one case.

**Etiology.**—In dysentery there is apparently more than one specific agent, besides the ordinary micro-organisms associated with the suppurative and putrefactive changes which take place within the bowel. An infective virus is present in the stools of tropical dysentery, the exact nature of which is unknown. Epidemic forms occur in temperate climates—endemo-epidemic forms in tropical and sub-tropical regions. It is not always malarial in origin; and simple catarrhal conditions of the bowel, with fatigue or hardship, predispose to attacks. The *amoebic enteritis*, or dysentery, characterised chiefly by ulcerations of the large bowel, is usually chronic in character with intermissions and exacerbations of diarrhoea. Amœbæ are found in the stools along with other organisms; but they are also found in other diseases and in the apparently healthy. Like *tropical dysentery*, abscesses form in the liver (amoebic abscess), but the relationship of true tropical dysentery to the amoebic form is still unsettled.

Drinking water is probably the chief vehicle by which the organisms reach the intestine, in all forms of dysentery.

The symptoms may begin with mild *tormina*, abdominal tenderness over the affected part, and diarrhoea, followed soon by feverishness and general *malaise*. In the severe epidemic form,

however, the onset is usually sudden and violent. The characteristic symptom is the burning pain in the rectum, with violent straining and purging. At first the stools contain fecal matter, but soon they are composed only of blood and mucus, and later, shreds of mucous membrane and *debris*. In a few days the blood increases in quantity and gangrenous sloughs may be passed, and sometimes entire casts of the part of the bowel affected. The fluid portions of the stools are puriform and highly offensive, and they are sometimes full of granules which have been described as like "sago grains." The fever is often high, and is of the intermittent type. There is usually nausea and vomiting. The bladder often sympathises with the bowel, and painful attempts at micturition are made without result. The urine is scanty and acid. The patient soon becomes exhausted, the features are pinched, the expression is anxious, and stupor and collapse may end the case. The severity of a case of dysentery is estimated by the straining of the bowels. In severe cases the attacks may be every few minutes, and may extend over a few days. In milder cases, the *tenesmus* may only occur ten or twenty times in the day.

The complications are phlebitis, peritonitis, pneumonia, and abscess of the liver—the latter being common. The mild cases may terminate in convalescence in about a week; and the severe cases gradually improve, and are free of characteristic symptoms in about three weeks—should the strength of the patient have enabled him to combat the disease. Sometimes a *chronic* dysentery is induced and recovery is only partial, with frequent relapses. There is then long continued ill-health, unless the patient be placed in very favourable circumstances. The case may terminate in waxy degenerations of the organs (liver, spleen, kidney, or bowel) leading to dropsy and death. The narrowing of cicatricial tissue may also lead ultimately to interference with nutrition, and death by exhaustion.

The prognosis is very grave in the severe forms.

The treatment of dysentery requires the administration of large doses of ipecacuanha—twenty to forty grains every four or six hours. The first doses are vomited, but subsequently a tolerance is established. It should be given in milk, and the diet should consist chiefly of milk, eggs, beef juice, custard, and chicken-broth. Brandy is necessary to sustain the strength.

Instead of ipecacuanha, laxative doses of Epsom salts, with dilute sulphuric acid, are believed by many authorities to be quite as efficient. Iron, bismuth, and calomel, or grey powder, with opium, are recommended. Benzo-naphthol is the best antiseptic. The bowels should be washed out from time to time with warm water; and enemata of starch and laudanum are very grateful during the course of the disease. Injections of nitrate of silver (twenty grains to the ounce) are highly recommended. They may be given after a hypodermic injection of morphia. Suppositories may also be used. Poultices, or turpentine stupes applied to the abdomen, afford relief. The discharges should be

disinfected with strong solution of sulphate of iron, and immediately removed from the room.

**Ileus, or Obstruction of the Bowels.**—The causes of obstruction may be usefully classified into three groups—viz: (1) extrinsic causes, (2) changes in the walls of the intestine, and (3) changes within the canal.

(1) The extrinsic causes are tumours and displaced organs which press upon the bowel. Ovarian and mesenteric tumours, cysts of the peritoneum and cancerous growths, floating kidney and displaced spleen, are examples of such obstructions. Constrictions by old bands of adhesion are common, especially in the neighbourhood of the appendix vermiformis; but bands often arise elsewhere, as between the mesentery, bowel, and pelvic organs. Slits in the mesentery or peritoneum, or weak parts in the diaphragm, are also possible causes of constriction of the bowel. Strangulated hernia is discussed in surgical works.

(2) The changes which occur in the intestinal walls themselves, producing obstruction, are intussusception; cicatrization and shrinking after dysentery, typhoid fever, or syphilis; tumours, polypi, hydatid cysts, and cancer; and twisting or torsion of the bowel (volvulus). In the latter disease, the sigmoid flexure is the commonest situation. Strictures are usually in the colon.

**Intussusception** is by far the commonest cause of obstruction, and it occurs chiefly in early life. It is always the upper part of the bowel which slips into the lower part, the cause being distention or paresis of the lower part, with spasm or contraction of the upper part. There are three layers of the bowel concerned with an intussusception, viz., the *entering* (C), *returning* (B), and *receiving* (A) layers. The bend of the entering layer remains fixed (E), while the bend of the receiving (upper) layer is constantly folding in (D). The most common part involved is the ileum, which thus passes into the cæcum. The invaginated bowel may sometimes be felt in the rectum, and it is even sometimes projected through the anus. The circulation is impeded in cases of intussusception—the mesentery being drawn in with the bowel. The parts become hyperæmic, and serum is exuded. The peritoneum is also congested, and in the later stages peritonitis is always a consequence. The bowel may become gangrenous, and large portions may slough and be passed *per anum*. A fatal peritonitis may result, when a slough has separated before there is complete union of the contiguous layers of the bowel. With these conditions, there is not necessarily complete obstruction of the canal.

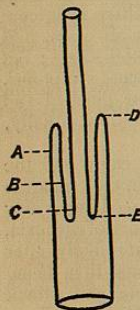


Fig. 25.  
Intussusception.

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(3) Changes within the canal causing obstruction are, the accumulation of fecal matter—chiefly in the cæcum, ascending, or

descending colon; biliary calculi and foreign bodies serving as nuclei for such accumulations; and chalk and magnesia deposits—when such have been taken in large quantities, medicinally. Habitual constipation tends to produce paresis of the bowel, and thus to favour the later development of obstructive conditions.\*

The symptoms common to all forms of obstruction are pain, distention, and partial or complete stoppage of the action of the bowels, with vomiting. The pain may not be very severe, and is rather, at first, a tenderness over the seat of obstruction. Sometimes, however, it is very acute, while in all cases there is, in addition to the abdominal tenderness, occasional attacks of colic pain. It is usually referred to the umbilical or iliac regions. The abdomen soon becomes distended with gas—usually in twenty-four to forty-eight hours, in cases of complete obstruction. The muscles become rigid. A tympanitic note can be elicited over the whole abdomen, except at those parts where accumulation of feces, or other solid obstruction, gives a dull note. If the abdomen be not too tense, the intestines may be felt as dilated cylinders above the obstruction. The breathing is embarrassed by the abdominal distention, but both the dyspnoea and distention are relieved, for a time, when there is much vomiting—or when the obstruction is incomplete and allows of occasional evacuations of the bowel. This last symptom is very deceptive, and is apt to raise the hope that the obstruction is overcome, and all danger is passed. In intussusception, diarrhoea may be present. The vomiting, when the obstruction is acute, is an early symptom. There is intense thirst. Symptoms of septic poisoning supervene in all cases, and may develop early. There is no fever during the initial stages; but the temperature rises with the continuation of the acute symptoms. The patient looks very anxious, the features become pinched and drawn, the eyes sunken, the voice husky, and then follow, usually, the signs of collapse, with stupor and death.

The physical signs of obstruction differ with the cause and the seat of the obstruction, and they must be considered in close relation to the symptoms and the history. A tumour or displaced organ may be felt, and the history of its development, or the presence of cachexia, may throw light upon the case. *Constrictions* are likely after attacks of peritonitis and perityphlitis—the symptoms then being sudden and very acute. If the symptoms be acute and attack the patient very suddenly—without a history of previous inflammation, and especially after some violent exercise—it is probably a twist in the bowel (*volvulus*). A slow development of the obstructive symptoms points to a gradual occlusion—as by tumour growths, and cicatrization after dysentery, typhoid fever, or syphilis. Faecal accumulations may be felt *per rectum*, or by abdominal palpation over the line of the colon and cæcum. A previous attack of gall-stones may suggest that a biliary calculus has served as a nucleus for faecal masses. In obstruction of the upper part of the bowel

\* In connection with obstruction of the bowels, the reader should turn to articles on Peritonitis, Perityphlitis, and Appendicitis (p. 177, *et seq.*).

the symptoms are more rapid, and the abdomen is not distended. The urine is diminished in all cases of acute obstruction.

*Bloody stools* are strongly suggestive of *intussusception*, and the bowel, sometimes, may be felt *per rectum*. There is often violent *tenesmus*, and it should be noted that this is the only form of occlusion which is so frequently accompanied by diarrhoea. The tumour caused by intussusception is peculiar. The shape and position changes under manipulation. It feels like a tense, cylindrical air ball. The ileum may descend into the rectum in about thirty-six hours. Some cases may terminate favourably in the sloughing of the bowel; but these are rare. Some again run a chronic course and ultimately recover; but these cases are also very exceptional. Death from gangrene or perforation is a common termination. Peritonitis is common to all forms of obstruction, and in the later stages, it may result from perforations, after acute inflammation set up by foreign bodies lodging in the bowel, or by gangrene, or simply by extension of the hyperæmia to the peritoneum. At the beginning of the peritonitis there is increased pain; and if the abdomen be not too distended with gas, diminished movement and flattening may be made out. This may suggest, or confirm, the site of the primary inflammation.

The prognosis is always grave. Those cases arising from impaction of feces are more favourable than any other. The *duration* of a case varies. A child may die of shock in a few hours; while other cases linger from two to three weeks.

The treatment of obstruction of the bowels varies with the cause. Until this be ascertained, no attempt should be made to produce evacuation by the use of purgatives or enemata. Complete rest is indicated, and morphia should be injected until the patient lies in a state of semi-somnolence from which he can just be aroused, if necessary. In cases of *volvulus* no further medical treatment is required; but later, in this and in other forms of obstruction, surgical procedures have to be considered. The bowel may be punctured with a fine needle in all cases of *extreme distention*, whatever be the cause.

In intussusception, the bowel may be distended with water, air, or gas, in an attempt to force back the intruding bowel. Lund's insufflator may be used, or an ordinary bellows—the anus being held by a compress to prevent escape of air. If water be used the pelvis should be raised. Should reduction fail by these methods, abdominal section should not be delayed. Inflation should only be carried out in the early stages, whatever the means used, as in the late stages adhesions may have formed, and the tissues are more liable to rupture. Warm applications are grateful, and an ice bag should be used over any local tenderness. The diet should be of the lightest description. Ice may be given to suck, and stimulants may become necessary to counteract the tendency to collapse.

Obstruction, due to impaction of feces, is treated differently, according to the seat. When rectal, or in the descending colon, efforts should be made to soften the feces by injections of warm