was blocked by a membranous septum about half-an-inch from the skin surface. No bulging could be felt during the child's straining, from which it was evident that the lower end of the rectum was not in contact with the septum. Nevertheless, I decided to puncture the membrane. No escape of intestinal contents followed; I therefore carefully dilated the opening already made, and introduced my finger into the peritoneal cavity. This examination confirmed my opinion; the rectum was altogether wanting, the blind bulging extremity of the sigmoid flexure being felt at the pelvic brim. I decided, therefore, to perform an inguinal colotomy.

The operation, after washing the anal depression with weak sublimate solution, and introducing a strip of iodoform gauze, was done in the usual way on the left side. The abdominal wall was incised down to the peritoneum, the incision being about one inch and a half in length, parallel to the outer part of Poupart's ligament, and commencing externally a little above the anterior superior spine of the ileum. After compressing one or two bleeding points the peritoneal sac was carefully opened, when the bowel immediately presented in the wound. Two firm silk sutures were passed through the skin and parietal peritoneum of the one side of the incision (the muscular tissue being avoided) through the bowel and then through the peritoneum and skin of the other side. The bowel was then incised longitudinally for half-an-inch, the silk sutures hooked up in a loop, divided, and tied on their respective sides; additional sutures were put in, completely closing the peritoneal sac. An immense quantity of material escaped from the bowel.

For several days after the operation there was considerable redness encircling the wound, and some sloughing of cellular tissue around the adherent peritoneal surfaces. Gradually, however, this healed, while the child, fed on peptonised milk, thrived well, and was discharged in an excellent state of health on the seventeenth day after operation. The mucous membrane had retracted within the bowel, and the wound had healed perfectly. The sound introduced through the false anus passes in a downward direction for little more than half-an-inch, striking there the blind extremity of the colon.

This condition, complete development of the anus with absence of the rectum, is rare. It is one that is likely to mislead the practitioner unless a very careful examination is made. Even on careful inspection the child appears to be perfectly developed, and unless the finger is passed into the anus the cause of the obstruction cannot be ascertained.

The history of this case of obstruction in the newborn child serves to emphasise the necessity of a careful digital examination of the bowel before resorting to any medicinal treatment. After the condition has been recognised the choice of operation seems to me a simple one. There are two alternatives, inguinal or lumbar colotomy, but the three facts, namely (1) the small amount of space available; (2) the frequency with which one finds a long mesocolon in the infant, and the consequent displacement of the colon; (3) the relatively large size of the kidney, and the consequent risk of injuring it, turn the balance in favour of opening the bowel in the groin.

ON THE DIAGNOSIS AND TREATMENT OF METRORRHAGIA.

By ARTHUR W. EDIS, M.D.LOND., F.R.C.P.,

Senior Physician to the Chelsea Hospital for Women; late Obstetric Physician to the Middlesex Hospital.

EVERYONE engaged in the daily routine of practice must frequently have met with cases of severe uterine hæmorrhage which puzzled him not a little, both as to their diagnosis and treatment, caused him much anxiety and worry at the time, and possibly led to much unpleasantness. With the hope of throwing some light upon the nature of these difficult cases, I offer the following remarks, trusting they may prove of service to some.

Of all the organs of the body, the uterus alone is subject to periodical hæmorrhages as a natural physiological process, during some thirty years of the individual's existence. This function is influenced by many and various conditions, both general and local, often exceedingly difficult to understand.

Menorrhagia must not be regarded as a disease or entity *per se*, for which one method of treatment is universally applicable, nor is it necessarily an invariable evidence of disease, for it may be merely an expression of constitutional or general vascular tension, the uterine mucous membrane acting, so to speak, as a safety valve, the hæmorrhage being positively beneficial, and affording us a useful hint as to treatment.

In attempting to deal with these cases, our first object should be to arrive at a correct diagnosis of the predisposing and exciting causes, for, until this be determined, any treatment must be empirical, and we are just as likely to be doing harm as good in attempting to repress the hæmorrhage by ordinary routine treatment.

The principle of diagnosis by exclusion is one which approves itself to many, and for general purposes is to be commended, determining, in fact, to what cause the loss is not due. This, of course, can only be done by knowing beforehand what are the most likely causes of severe uterine hæmorrhage—the possibilities, so to speak—and then eliminating one after the other, until we have left only two or more probabilities. It is more especially in attempting to deal with a symptom like this that we see the importance of the gynaecologist being a good all-round general practitioner, with special experience in uterine disorders, not a mere specialist, who can see nothing amiss in a patient except through a vaginal speculum.

Before even attempting to make a local investigation of the pelvic organs, we should be careful to exclude any general constitutional conditions, such as are not infrequently met with from impairment of the function of the heart, liver, or kidneys, aggravated, it may be, by the injudicious employment of alcohol, which had been prescribed with a view of relieving the more distressing symptoms.

Some of the most difficult cases, as regards diagnosis, occur at or about the so-called climacteric period. Terminal floodings are by no means infrequent. A patient becomes irregular, passes over an interval of several months without seeing anything, and then has profuse uterine hæmorrhage. This may merely imply the lessening of arterial tension at the surface of least resistance—Nature's method of affording relief—or it may be evidence of hepatic congestion due to the abuse of alcohol, a miscarriage, or the first indication of commencing malignant degeneration of the cervix uteri.

We should always endeavour to get as clear and concise a history as possible, but be careful to elicit facts and not be misled by theories. Having satisfied ourselves, so far as possible, that the hæmorrhage is due to some local and not constitutional condition, we must then endeavour to determine the exact nature of this lesion.

Speaking generally, the most frequent local causes of metrorrhagia will be found to be threatening miscarriage; retained products of conception from incomplete abortion, or retention of a small portion of placenta; subinvolution with granular erosion or laceration of the cervix uteri; villous endometritis; hæmatocele; new growths in the form of polypi, fibroids, or malignant disease of the fundus or cervix uteri; retroflexion of the uterus, with or without prolapse of one or both ovaries.

Exceptionally we must not overlook the possibility of extra-uterine gestation, cystic degeneration of the villi of the chorion, and inversion of the uterus. The mere fact of a patient going even a few weeks beyond the ordinary time at which the menstrual period should have occurred, and then coming on profusely unwell, should put us on our guard as to the possibility of a miscarriage.

If pain of a colicky nature on either side of the abdomen has preceded the loss, ectopic or extrauterine gestation should be suspected, and the symptoms carefully inquired into. The presence of some enlargement behind or to one side of the uterus would still further point to such a condition being present.

In case of hæmatocele the attack occurs, more or less suddenly, at or about a menstrual epoch, producing well marked symptoms of shock, fainting, and pelvic discomfort. There is generally a history of chill, as from sitting on damp grass or getting wet, undue or prolonged fatigue or other likely cause of that nature.

Any one of the causes mentioned being sufficient to cause excessive loss, it follows that a coincidence of two or more of these conditions will be still more likely to keep it up; and herein lies an important hint for treatment.

A patient may be the subject of intramural fibroid of the uterus for years without necessarily suffering from excessive loss, but if

as not infrequently happens, the endometrium becomes affected with villous degeneration, metrorrhagia often becomes a marked symptom.

Where hysterectomy is not deemed advisable, or the patient refuses all idea of operation, curetting the uterine cavity or applying some strong styptic may effectually prevent the recurrence of profuse hæmorrhage, and thus prove of much service in removing the symptom for which we were consulted. Again, a patient may have had a fibroid tumour for years without any very urgent symptoms, but errors in diet, and undue stimulation by alcohol, may induce severe hæmorrhage. Careful attention to the former and abstention from the latter, may make all the difference as to the loss incurred.

Treatment.—A correct diagnosis being the first and most important element of treatment, it follows as a matter of course that having ascertained the presumed cause we know then what our plan of action should be. Still there are some practical hints which may be found to be of value to some. Where the hæmorrhage results from constitutional or general conditions it is not always wise to attempt to check the flow at once, unless it is producing such an effect upon the system generally as to suggest the expediency of arresting it at all hazards. In certain cases of heart disease uterine hæmorrhage, in place of aggravating, seems to relieve the cardiac symptoms, and should not therefore be hastily repressed. Strophanthus, digitalis, and aconite here prove most useful. Where the action of the liver seems to be at fault, attention to diet, abstention from alcohol, and the administration of a few grains of calomel or pil. hydrarg. or euonymin, followed by a brisk saline aperient, will probably be indicated. If albuminuria be present, or the kidneys seem to be at fault, encourage vicarious action of skin and bowels by means of diaphoretics and purgatives, and follow out any other indications suggested. In cases of menorrhagic chlorosis, bromide of potassium in half-drachm doses has proved of service, iron being given between the periods with strychnine; attention being also given to ordinary hygienic details, avoidance of tight lacing and physical overwork. It is well to remember that hæmophilia, scurvy, malaria from residence in damp or marshy districts, lead poisoning, and other unusual conditions will occasionally explain the presence of metrorrhagia. The mere recognition of the cause will be at once a suggestion as to the proper course of treatment.

Where uterine hæmorrhage persists, notwithstanding the employment of constitutional measures, and there is no apparent local cause to account for it, we should without further delay dilate the cervix uteri and explore the interior of the uterus. Numerous instances have been recorded of patients dying from uncontrollable hæmorrhage, where a *post-mortem* examination revealed the existence of some intrauterine growth, such as a polypus or submucous fibroid, retained product of conception, or fungoid condition of the endometrium, which could readily have been removed or dealt with had appropriate measures been adopted in time, and the patient's life thus saved.

The mere fact of inserting a sponge tent into the cervix uteri arrests the hæmorrhage for the time being, and facilitates subsequent exploration of the uterine cavity. As to any risk of reflux through the Fallopian tube, as sometimes spoken of, it is a mere visionary objection, and need not deter us from employing dilatation in suitable cases. Plugging the vagina is a very unscientific procedure, as well as being unsatisfactory and inefficient. It should seldom, if ever, be resorted to.

It would clearly be impossible in these brief remarks to indicate in detail the methods of local treatment, such as curetting for villous endometritis, removing polypi, operating for cancer, the use of electricity in cases of myoma, the best method of dealing with cases of incomplete abortion, or replacing an inverted uterus. If we have once clearly made out the indications for treatment the rest is merely a matter of detail. But now and again instances occur where no assignable cause, either constitutional or local, can be made out, and where remedies fail to restrain the hæmorrhage. In such cases the hot vaginal douche may prove of service, or even washing out the uterine cavity with hot water through a double current catheter, provided the cervix be patulous enough to admit it. Should this fail it may be considered requisite to wash out the interior of the uterus with a strong solution of iodine or iron. As a *dernier ressort*, the insertion of a sponge tent into the cervix uteri may be effected.

The reliable remedies at our disposal for checking or arresting uterine hæmorrhage are really very few. Ergot is unquestionably

one of our most potent; *hydrastis Canadensis* is a valuable agent, and far too little generally known. In cases of myoma it often proves of service when ergot has failed. Hamamelis, which forms the basis of the American nostrum hazeline, is sometimes useful. Quinine and strychnine, alone or in combination, often succeed in checking or arresting hæmorrhage in those cases where the system is much depressed from repeated or prolonged losses. Bromide of potassium in cases of ovarian irritation, and even in hæmatocele, possesses the power of checking hæmorrhage equal, if not superior, to that of any remedy we possess. Chlorate of potash in combination with ergot has lately been strongly recommended. Opium is beneficial in cases where the loss has already been severe. Sulphuric acid and opium used to be, and still is, with some practitioners, a favourite remedy; so, also, acetate of lead and opium in form of pill.

The ordinary astringents, such as gallic and sulphuric acid, have really very little influence in restraining hæmorrhage, and are far too often relied upon. Iron is often of much benefit in those cases where the loss has been very profuse, as in myomas, and the blood has become so attenuated as to pass readily through the capillaries. Digitalis, in combination with iron, proves most valuable in cardiac complications.

In place, however, of attempting empirically to deal with the effect, we should always endeavour to arrive at a definite opinion as to the cause of the hæmorrhage, and, if we can deal with this satisfactorily, the treatment is very simple.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

ALBUMINURIA WITHOUT DROPSY.

DR. GOODHART'S lectures, recently published in the JOURNAL, recall to my mind two cases which appear to me worth reporting.

The first was a girl, aged nearly 14, who was brought to me as an out-patient at the Hospital for Sick Children in May, 1887. She was suffering from diarrhoea and vomiting; there was no oedema; and the appearance was by no means anæmic. The temperature (taken in the morning) was subnormal. Careful examination showed no evidence of lung disease. There was certainly no more wasting than might have been accounted for by the persistent diarrhoea. The illness appeared to have commenced five years before with headache and sickness; the patient had never been really well since. No oedema had ever been observed. So far as I could gather, the urine had never been tested until the patient came under my care. I found it contained more than half its volume of albumen, that is, on complete subsidence after boiling.

The treatment which gave most relief was the administration of jaborandi, the patient being kept in bed. When free diaphoresis was established by this means, the diarrhoea became much less and the appetite improved. Oedema, which had appeared since the first observation, while the patient was under other treatment, wholly disappeared again; and the quantity of albumen was sometimes as low as one-seventh, although it rose again at times to one-half. The dose of jaborandi was seven minims of the tincture three times daily, increased gradually to twenty minims as tolerance of the drug was produced by continued administration. The improvement, however, though sufficiently marked, was only temporary. In August the diarrhoea returned, in spite of free diaphoresis maintained by the jaborandi. And this continued more or less until the patient ceased to be under my care in November. Not long afterwards she died. No *post-mortem* examination was obtained.

My second case was that of a young man, aged 20, who came before me as a candidate for life insurance. The most careful inquiry failed to elicit the slightest evidence of ill-health in any way. His complexion was healthily florid; his muscles were well developed and powerful; he was an enthusiastic football player. Nevertheless, the urine contained one-third of albumen; and from September, 1889, to January, 1890 (after which I lost sight of the patient), the urine never contained less than one-fourth of albu-