ceases to conceive. It is too true that myomatous uteri do become gravid, but in many cases it places the life of the woman in the gravest peril.

It is clearly established that myomata arise in the uterus during the sexual period of life. The subjoined table of 100 consecutive cases, in which I operated and the nature of the tumours was clearly established, shows the age-distribution:

Under 30 ...	...	...	5
30 to 39 ...	...	...	42
40 to 49 ...	...	...	44
50 to 60 ...	...	...	9
Total ..	...	...	100

Of this number, 36 were single women and 64 married; of the latter, 17 were mothers; one of the women had a family of eight children. It is also important to remember that in 96 of the patients menstruation was unabated at the date of operation, indicating that the ovaries were functional and therefore worth preserving.

In all cases in which I have performed conservative hysterectomy, that is, removal of the uterus with preservation of one or both ovaries, these glands are always very carefully examined to ensure that they are, as far as can be determined in the course of the operation, free from disease. Tubal distension is at once a bar to the method. Often an ovary is occupied by a cyst, and not infrequently is converted into a dermoid; this at once determines which ovary should be preserved. All who have performed oöphorectomy know well that one ovary usually has a longer pedicle than its fellow; this allows it to be more easily manipulated, and renders more convenient for removal. Hence, if both ovaries are healthy, and the operation is facilitated by its removal, I do not hesitate to take it away; thus the patient does not incur any additional risks by indiscreet attempts to save both glands.

It is no part of my plan to-night to discuss the treatment of uterine myomata. On this subject the most diverse opinions may be and are entertained, but what I do wish to emphasise is the great importance of bearing in mind when advising operative interference, in those cases which demand the skill and care of the surgeon, the great influence of the ovaries. A woman suffers no remote inconvenience from the loss of her womb, and the principles of conservative surgery are more truly observed by sacrificing it in preference to removing both ovaries.

CONCLUSIONS.

A careful consideration of all the facts makes it clear that the uterus can only be considered as a receptacle or reservoir wherein oöperms may develop. It is secondary, and certainly subservient, to the ovaries. It is not a vital organ, and its removal entails two physiologic sequelæ in women during the sexual period of life, namely, amenorrhœa and sterility.

It is necessary to discuss the uterus in this way because of the notion or superstition that there is something which distinguishes the uterus from other viscera, and that its removal is followed by mental aberration and other serious nervous disturbances. All this is now known to be mythical, but a careful consideration of the physiology of the ovary in the light of increased knowledge, mainly the outcome of surgical enterprise, leads us to a better appreciation of ovarian dominance, and its tyrannical influence over the life and well-being of women.

REMARKS UPON THE OPERATIVE TREATMENT OF DISTENDED SMALL INTESTINE IN ACUTE OBSTRUCTION AND IN ACUTE PERITONITIS,

WITH ILLUSTRATIVE CASES.

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MANY as are the points which have to be considered in the operative treatment of acute intestinal obstruction, those connected with the distended gut are, in importance, secondary only to the removal of the exciting cause. To remove the cause, and yet to neglect the over-distended and

loaded intestine, is frequently to lose a life that might have been saved.

What the circumstances are that finally cause paralysis of the bowel, or what the degree of this paralysis beyond which recovery is not possible, one cannot say. A primary factor in the production of bowel distension, not dependent upon peritonitis, is the damming back of the contents. This, however, if an early factor, can hardly be considered the most important, because, sooner or later, relief of the engorgement may be brought about by vomiting.

It is more than likely that muscular exhaustion and faecal poisoning so derange the function of the intestinal walls that they eventually are unable to resist the distending influences of gas and intestinal secretion. The higher up the bowel the seat of obstruction, the sooner the proximal segment distends and loses its power to retract. This is what might reasonably be expected, because the efforts on the part of the muscular parietes to overcome the obstruction and drive on the contents are practically continuous, and lose that intermittency and opportunity of rest to some extent afforded when the obstruction is nearer or actually in the large bowel. That there is probably some toxic influence paralysing possibly both the muscle of the bowel wall and its local nerve supply is supported by the unquestionable evidence of general toxæmia met with in some cases. It has occurred in my own practice to lose a patient in whom operation had relieved all obstructive symptoms, and whose general conditions suggested nothing but that of faecal toxæmia. What the poison produced within the intestinal canal may be is not known, but from the quantity of gas generated in many cases as well as the excessive secretion, it seems in the highest degree probable that certain abnormal fermentative and chemical changes do take place.

It is probable, moreover, that the blood vessels and the elastic tissue in the intestinal walls also suffer. The former dilate and produce the familiar livid appearance of the bowel wall, while the latter loses its power of recoil after it has been stretched beyond a certain limit.

It is evident from these considerations that if any value is to be attached to them, all operative measures for the relief of obstruction involving distension of the small gut must have in view:

1. The prevention of any increase in the distension of the bowel.
2. The removal, as completely as possible, of the intestinal contents.

There is no doubt that the bowel when within the abdomen is to a considerable extent supported by the abdominal parietes, and its distension thereby limited; and that its limits are the sooner reached the lower the seat of the obstruction. For example, if the obstruction be at the caecal end of the ileum, there is a long extent of the bowel to be dilated and the coils as they distend support each other and limit the dilatation. When, on the other hand, the obstruction is nearest the upper end of the jejunum there is less limiting resistance offered by the lower collapsed coils, and so more room is afforded for the distension of the proximal segment. The marked effect produced by this intra-abdominal pressure I observed in some of my earlier cases, when it was my custom immediately on opening the abdominal cavity to extraventrate the distended coils and allow them to lie in a specially shaped hot-water receiver while I sought for the cause of obstruction. I was impressed with the increased size which the exposed and unsupported coils rapidly assumed. The question then arose, in view of the evils connected with additional distension, whether it would not be wiser to reverse the order of procedure and empty the bowels before attempting to find the cause of the obstruction. This course I now always pursue, as, I believe, with the best results. After opening the abdominal cavity, the distended coil that presents is at once withdrawn sufficiently to admit of an incision being made in its long axis, so as to allow the contents to escape without risk of contaminating the peritoneal cavity. As they flow out and the bowel wall collapses a greater extent of gut is withdrawn. This part of the operation is taken charge of by assistants, while the operator is left free to seek for the obstruction.

If, as has been stated, there is truth in the assumption that the bowel contains products capable of producing a condition of toxæmia, then we may reasonably suppose that the risks of

general infection are diminished in proportion to the amount of the poison we are able to remove. Acting on this belief, I am now in the habit of squeezing out the contents through the "evacuatory incision." Before or after the relief of the obstruction, as the case may require, the bowel is passed between the finger and thumb, the assistant meanwhile so securing the "evacuatory incision," that when pressure is exercised on the proximal segment the intestinal contents cannot pass on into the distal but must escape through the opening, and *vice versa* preventing the passage of the contents into the proximal segment when the distal is squeezed. When the bowel is much distended, and especially if there is any very great length involved, this squeezing out of the contents may have to be repeated several times, the bowel being taken up at different points and squeezed onwards or outwards. In such cases it is sometimes advantageous to make more than one "evacuatory incision" in order to lessen the time by shortening the extent of the canal through which its contents have to be squeezed. This stage of the operation is completed by closing the "evacuatory incision" with a continuous Lembert suture, and carefully cleansing the parts before returning the gut into the abdominal cavity.

The amount of handling of the intestines required in order to effect an approximately complete evacuation of their contents is necessarily considerable, but, contrary I believe to what would be expected and is usually supposed, the effect is beneficial rather than otherwise. I have not had a case where, so far as I can judge, it has not been so. If the bowel has not lost all its power of contraction, the squeezing seems to act as a stimulant to the muscular coat, and at the same time the vessels are to some extent relieved of their engorgement. It is a good sign if the bowel wrinkles after being emptied, as it indicates some contractile power on the part of the muscular coat; and it need hardly be pointed out that it is a still better sign if the bowel tends to evacuate its contents after the incision has been made independently of any squeezing.

In cases of peritonitis where the cause of bowel distension is paralysis of the muscular coat from inflammation of its serous covering, much good seems to follow the insertion of a solution of magnesium sulphate through the "evacuatory incision" just prior to its closure. After the contents have been thoroughly squeezed out, about an ounce of sulphate of magnesia in solution is injected through the "evacuatory incision." In cases which recover, this treatment brings about an early and copious evacuation of the bowels.

The following cases are given to illustrate the above remarks:

CASE I. Acute Peritonitis from Perforation of the Appendix: Appendicectomy: Enterotomy: Recovery.—Mr. B., aged 28, a patient of Dr. Robert Forrest, with whom I saw him in consultation, was recovering from his third attack of appendicitis. There existed some tenderness and fullness about the right iliac fossa, but beyond a slight sense of discomfort in this region, he had no other symptoms of moment although he remained in bed. On the fifth day after I saw him, there was a marked exacerbation of his symptoms, ending in the course of some hours in very evident indications of acute peritonitis. Operation was at once decided upon, and the following method adopted. A curvilinear incision was made in the right inguinal region. The cecum was found so adherent to the parietes that, on attempting to separate the parts, it was opened and fluid faeces escaped. The opening was clamped with forceps while the operation was proceeded with. There was much matting of the parts about the cecum, and some purulent fluid escaped from among the coils of intestine. The appendix was sought for and found among much matted tissue, which made its removal difficult. The abdomen was then opened in the middle line, and the intestines rapidly turned out into a hot-water tin. They were all much distended and injected, and coated with plaques of lymph. The upper coils were the most distended, and very livid in appearance. The pelvic and general peritoneal cavity was freely flushed with hot normal saline solution. The lower part of the ileum was then incised, and the contents of the bowel allowed to flow out. Gas and fluid escaped freely at first, but then ceased, so that it was necessary to squeeze out the contents of the distended coils by passing them between the finger and thumb. This was repeated about three times, commencing as high up as possible, and passing the whole way down to the opening. By this means the intestines were reduced to an almost collapsed condition, and after stitching up the opening were easily returned within the abdomen. A few plaques of fibrin were peeled off, but they were mostly too adherent to be detached. The clamped orifice in the cecum was stitched up, and both abdominal incisions completely closed. The operation lasted about two hours. He made an uninterrupted and complete recovery, and has since become a champion tennis player.

CASE II. Acute Intestinal Obstruction from Kinking of the Ileum due to Adhesions: Enterotomy: Laparotomy: Temporary Recovery.—D. McG., aged 72 years, was admitted to the Victoria Infirmary on January 6th, 1899. Nine days prior to admission he was seized with cramps in his abdomen, followed three days later by vomiting and hiccough. When seen on admission he complained greatly of pain in the umbilical region, and possessed features

peculiarly characteristic of a man suffering from acute abdominal disease. His pulse, however, was in every respect good, and his temperature normal. He had passed neither faeces nor flatus; and while his symptoms were typically those of obstruction, no indication could be got of its probable nature. With the assistance of Drs. Alexander MacLennan, James McHaffie, and John MacDonald, an exploratory incision was made in the right iliac region; distended small intestine presented, and the large bowel was discovered contracted. A median incision was then made, when distended coils of small bowel escaped. The presenting loop was drawn out and incised, when a quantity of fluid material escaped. This incised loop was taken charge of by an assistant, who gradually emptied more coils of the bowel. Meanwhile a search was made for the cause of the obstruction, and a loop of ileum was discovered bent, and closely bound down by dense adhesions to the posterior wall of the bladder. The depth and strength of these adhesions rendered it advisable to make a "lateral approximation" rather than spend time over an attempt to detach the bowel. This was accordingly done, a few inches above the "kink," by the aid of a Murphy button. Attention was now directed to the remainder of the distended gut, much faecal matter was squeezed out of the "evacuatory incision," but as such a great length of the intestine was involved another "evacuatory incision" was made higher up, and this part of the bowel emptied. After the completion of the operation, which had lasted an hour, the patient's abdomen was thoroughly washed out. He rallied well from the operation. On the evening of the following day a copious water enema was given, which caused a slight evacuation and the escape of flatus. His pulse was excellent and temperature normal; there was no vomiting, but he had occasional hiccough. On the subsequent days the bowels moved freely, and quantities of flatus were passed. His recovery seemed likely, but on the sixth day he began to show signs of failing, and died on the seventh day, apparently from causes dependent on his advanced age.

CASE III. Acute Diffuse Suppurative Peritonitis: Laparotomy: Enterotomy: Recovery (Abstract of report by Dr. C. Fleming).—Mrs. M., aged 31 years, was admitted to the Victoria Infirmary, on October 5th, 1897. She had given birth to a child six weeks previously, and had not since been free from abdominal discomfort. Twenty-five hours before admission she was seized with abdominal pain, accompanied by vomiting and purging. When first seen, shortly after admission, her face was pinched and anxious-looking, pulse small and rapid—150 per minute—temperature 103° F. The abdominal pain was very severe. The abdomen was distended and tympanitic, and tender on manipulation. The urine contained abundant albumen. Believing the case to be one of perforation, the patient was removed to the theatre, and an exploratory incision made above the umbilicus. On opening the peritoneal cavity turbid fluid immediately escaped containing flakes of lymph. It had no faecal odour. The incision was now carried downwards about 4 inches, and a large quantity of purulent fluid welled up and out from the pelvic cavity. A search was made for any possible perforation, but none was found. The small intestines were much distended and congested. An "evacuatory incision" was made into a loop, and a quantity of faecal matter was forcibly and continuously expelled without any digital manipulation. Before closing the "evacuatory incision" one ounce of magnesium sulphate in solution was injected into the bowel. The peritoneal cavity was freely flushed with hot normal saline solution, and after the insertion of a drainage tube into the pelvic cavity, the greater part of the abdominal incision was stitched up. Improvement in her condition was in no sense marked until early in the morning of the second day, when flatus was passed, and the bowels moved naturally. From that period onwards she made an almost uninterrupted recovery.

CASE IV. Acute Intestinal Obstruction from Volvulus (?) of the Small Intestine: Laparotomy: Enterotomy: Recovery. (Abstract of report taken by Dr. Charles Fleming).—Mrs. B., aged 38 years, was admitted to the Victoria Infirmary under the care of Mr. Maylard, on March 7th, 1898. She was suffering from symptoms of acute intestinal obstruction of two days' duration. Her symptoms commenced with violent pain in the epigastrium and left hypochondrium, accompanied by vomiting. The pain subsided, but vomiting continued. Her bowels had not moved since the onset of her illness. On admission the abdomen was found somewhat distended. Palpation did not cause pain, and revealed nothing. Her pulse was 100, fairly strong, and her temperature 100.4° F. The abdomen was opened by a median incision when some clear serous fluid escaped. The small intestines which presented were distended and injected. The coils were rapidly turned out into a hot tin and search made for the obstructing agent. Nothing, however, was found, and the appearance of the parts suggested the probability that there had been a twist of a long loop of the jejunum on its mesenteric axis. An "evacuatory incision" was then made into the lower part of the distended section, and as only a small quantity of gas and faeces escaped, the gut was passed through between the fingers and the thumb, and its contents squeezed out. The orifice was made use of for the injection of about 3 drachms of a watery solution of sulphate of magnesia. As the coils of intestine were returned into the abdominal cavity they were drenched with hot normal saline solution. The operation lasted about three-quarters of an hour. The patient rallied well and made a rapid and uninterrupted recovery.

ON THE REMOVAL OF A NÆVOID TUMOUR OF THE INTESTINE.

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THE following case of acute intestinal obstruction was successfully treated by the removal of a nœvoid tumour of the intestine, with a double intussusception, involving over 5 feet of the bowel:

History and Symptoms.—Miss A., aged 23, was seen, in consultation with Drs. MacLennan and Middleton, on the morning of September 28th, 1898. Her symptoms, which had set in suddenly twenty-four hours previously,