

cases, far better off if he never attempted it. No better proof of this could exist than the fact that usually men who have the greatest reputation as physicians in every locality are those who do no surgery at all, except now and then an emergency case. By so doing the physician has the implicit confidence of his patients that in the event an operation is needed he will do everything in his power to secure a competent man to do it and not try it himself.

There can be no doubt that the control of a hospital has much to do with the success of a surgical practice. The establishment of private hospitals is becoming more and more frequent, and upon investigation I find that some of the most successful places in the country are private institutions which are conducted by a single man or a group of men associating themselves together and thereby being able to control the policy of the institution. They are usually successful for the reason that the men associated with them make them so. It is the *man who makes the institution* and not the *institution that makes the man*.

No better example of this can be had than that of the St. Mary's Hospital in Rochester, Minn. There is probably more surgery done in this hospital than in any other hospital in the United States, but it is all done by the Mayo brothers and their assistants. It is probable that nine out of every ten patients that go there do not know the name of the hospital—whether it is public or private; sectarian or non-sectarian. Furthermore, they do not care. They go there to obtain the benefit of the art of surgery at the hands of either of the Mayo brothers, and the hospital is a secondary consideration.

This, then, is the reason that private hospitals are being established throughout the country by men who have a local reputation, and thus hospitals are managed by the men who come in contact with the patients, and know what they want and what they ought to have. It is given to them, and the results are that private hospitals throughout the country are becoming very popular.

DISCUSSION.

DR. H. G. STETSON, of Greenfield: I think we are indebted to Dr. Richardson because we in the country, at least, think good surgery can be done in the small places. As he says, it has its advantages and disadvantages. In the small towns you do get good operators, but with a little bit of a disposition to run to the extreme; and as he says, the younger men feel that they can do operating even if they have not had the proper training to begin with. I believe that ultimately this will reach its level; that the man who can do the work and do it successfully will do it, or a larger part of it, and the public will come to see that the experienced man is the one to go to, and not the family physician.

As he says also, in regard to the smaller hospitals and the men that are connected with them,—it is the man that makes the hospital and not the hospital that makes the man. A hospital is successful if it has a good working staff, if it has

men connected with it who are capable of doing good work, both medical and surgical, and who command the confidence and respect of the physicians in the community in which it is situated.

The country surgeon in some ways has the disadvantage of his city brother in that he is called upon many times to operate upon patients who are *in extremis*—patients who have been allowed to go on longer than his brother in the city allows them to go on. They are more distant from the hospital, it is very difficult to transport them, and in consequence, by the time the surgeon sees them, they are not in as good shape to operate upon as oftentimes they are in the city, and for that reason I believe that the city man, from the nature of his work, is able to do better work than the man in the country.

And again, I believe that, all things considered, in many communities in the state of Massachusetts (and for that matter, all over the country), there is excellent surgery done in the small country hospitals. And I should most heartily commend the statement he makes, that a man should not do general surgery unless he has some peculiar fitting qualities, and unless he has had some experience; and every man should not feel that he can remove an appendix, simply because he has seen some one else do it.

The country surgeon, the surgeon in the smaller communities, has come to stay. Whether at some future time every small community will have its one or two men who do surgery alone, I am unable to say. I am inclined to think that will be so; in communities of 8,000 or 10,000 people some one man will give up general practice and do surgery alone, and it is going to be for the benefit of surgery.

OMENTOPEXY TO THE INTESTINE DEPRIVED OF ITS MESENTERY.

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It is common knowledge among surgeons that the human intestine cannot be deprived of its mesentery without danger of damage to the intestine.

Litten¹ demonstrated that ligation of the superior mesenteric artery caused necrosis of the intestine.

Madelung² demonstrated that in dogs and rabbits the intestine deprived of 8, 10 or 15 cm. of mesentery underwent necrosis.

Rydyjier, Tansini and Zesas confirmed these experiments of Madelung and also demonstrated that dividing the mesentery close to the intestine was more dangerous to the integrity of the gut than dividing it some distance away from its attachment to the intestine.

Bier³ demonstrated that in rabbits only from 3 to 5 cm. of the intestine could be deprived of its mesentery without undergoing necrosis.

Lanz⁴ experimented upon two dogs. Dog 1

¹ Virchow's Arch., Bd. lxi.

² Arch. für klin. Chir., Bd. xxvii, Hft. 2.

³ Virchow's Arch., Bd. cxlvii, Hft. 3.

⁴ Zentralbl. für Chir., June 1, 1908.

lived some time after 50 cm. of intestine had been deprived of mesentery at three different operations, one month apart. The omentum was placed about the gut at the first operation and attached to its mesenteric border at the two subsequent operations. At autopsy the gut was functionally active and anatomically intact. The second dog died, after 50 cm. of intestine had been deprived of its mesentery, of a purulent peritonitis.

Lanz⁴ has employed omentopexy in one operation upon the human subject, in which, after having removed a cancer of the stomach, he attached the omentum to the transverse colon, which had been deprived of its mesentery. The patient recovered.

I have undertaken experiments upon four dogs simply to note the behavior of the bowel after it has been shorn of its mesentery and the omentum has been used to take the place of the mesenteric blood supply. As a result of the work by other investigators and my own series of experiments, I am inclined to regard this procedure of omentopexy to the gut deprived of its mesentery as of very limited usefulness in human intestinal surgery. Resection and anastomosis of the bowel is, of course, the procedure best adapted to the conditions following a removal, accidental or intentional, of the mesentery from the bowel. It is conceivable that an omentopexy might prevent necrosis of the bowel if a limited portion of intestine (2 or 3 cm.) were deprived of its mesentery. The value of an omentopexy to the bowel would be increased if a plastic of omentum were made to either side of the denuded area.

Experiments were made upon four dogs to determine the result of detaching the mesentery from a measured length of gut and replacing the detached mesentery by omentum.

Experiment No. 1. Dog No. 1. Nov. 27, 1907. Six centimeters of intestine were freed of mesentery. The mesenteric vessels were ligated at some distance from the intestine. The gut became slightly dusky. The border of the omentum was refreshed and sutured to the ligated mesenteric attachment.

Dec. 30, 1907. The site of the previous omentopexy showed firm union between the omentum and bowel. There was no apparent change in the gut. Ten centimeters more of gut contiguous to the seat of the previous operation were freed of its mesentery. The intestine supplied by this mesentery became a dusky blue. The free denuded border of the omentum was sutured to the mesenteric attachment over these 10 cm.

Jan. 23, 1908. The intestine was found normal in appearance and behavior. The omentum was firmly attached to and evidently nourishing the bowel at the place of the first and last suture. The animal was killed.

Experiment No. 2. Dog No. 2. Nov. 29, 1907. Five centimeters of intestine were freed of mesentery. The vessels were ligated close to the bowel. The gut became very dusky. The free border of the omentum was refreshed and sutured to the free gut at the mesenteric attachment.

Dec. 30, 1907. The intestine at the seat of operation was intact. All the intestine denuded of mesentery and the omentum were adherent. Ten centimeters more of contiguous bowel were denuded of its mesentery. The intestine was pale and blue, somewhat contracted. Omentopexy done.

Jan. 1, 1908. The dog died. Autopsy: Intestinal gangrene; bloody fluid was in the peritoneal cavity.

Experiment No. 3. Dog No. 3. Nov. 29, 1907. Five centimeters of intestine freed of mesentery. Vessels ligated close to the intestine. Gut dusky in color, but less dusky than in dog No. 2. Omentum refreshed and sutured to denuded gut.

Dec. 30, 1907. Appearance normal, the omentum having united to the mesenteric attachment of the denuded gut. Fifteen centimeters more of the gut were denuded and the omentum attached. The mesentery in this case was ligated far away from the gut rather than close to it.

Jan. 18. All the parts in a normal condition, the omentum having healed as sutured to the denuded gut.

Experiment No. 4. Dog No. 4. Nov. 30, 1907. Eight centimeters of intestine freed of its mesentery close to the gut. The gut was dusky in color as in Experiment No. 2, but the duskiess extended over a larger area. The omentum was denuded and sutured to the mesenteric attachment of the gut.

Dec. 30, 1907. Many adhesions of the omentum found to the denuded gut. The sutured omentum had healed. There was a hard mass in the intestine at the seat of the denudation, the gut was resected and an end-to-end anastomosis done with the Connell suture.

Jan. 5, 1908. This dog died of pneumonia. The abdomen was perfectly clean, the intestinal suture intact. At the examination of the mass removed, was found a large piece of bone impacted in the intestine which had been denuded of mesentery.

These experiments demonstrate that in the dog, if the vessels in the mesentery are tied far from the mesenteric attachment, the gut remains viable even when considerable mesentery is detached. The nearer to the gut the ligation is made of the mesenteric vessels, the less detachment of mesentery can be made and viable gut remain. From 16 to 20 centimeters of gut may be denuded with subsequent omentopexy safely. Ten centimeters may be denuded with omentopexy, with gangrene. In the instances which recovered, after two denudations and two omentopexies, the gut at the seat of operation was slightly smaller in size and a little thicker from edema.

Clinical Department.

REPORT OF A CASE OF PRIMARY CARCINOMA OF THE APPENDIX WITH A STATEMENT OF THE LITERATURE.*

BY C. O. KEPLER, M.D., BOSTON.

H. F. B., American born. Forty-three years of age. Occupation, housewife.

Family history. — Unimportant until six years ago, when the patient, who has always been irregular since the beginning of her catamenia at sixteen, this irregularity varying from three weeks to three months, began to have a foul leucorrheal discharge, associated with almost constant flowings, usually scant, but occasionally very profuse. After three months of this condition patient was operated upon at the Worcester City Hospital, Jan. 27, 1902, by Dr. Lemuel Woodward, who is said to have removed a fibroid tumor. Patient says she was relieved of her symptoms after the operation. Patient has been married twenty-three years and has never conceived.

* Read at the meeting of the Obstetrical Society of Boston, April 28, 1908.