APPENDICOSTOMY FOR THE RELIEF OF THIRST AND INANITION AFTER ABDOMINAL OPERATIONS.

BY

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In the surgery of the digestive tract post-operative treatment is of great importance throughout the first week. A patient who has suffered for months from malnutrition due to ulceration or gall stones comes to operation in a cachectic and emaciated condition, the operation perhaps made urgently necessary by perforation or pain. Such a patient, lacking reserves, is unable to stand the semi-starvation which follows, and may die within three or four days from thirst or starvation. The stomach will not retain enough fluid. The rectum returns it. Blood transfusion and intravenous infusions of various kinds are useful for the moment, but their effect is transitory.

Jejunostomy jeopardizes a most vulnerable and important part of the gut, and appendicostomy has hitherto entailed a gridiron or other secondary incision.

I wish now to describe a method by which appendicostomy may be performed in a few seconds at the close of any ordinary abdominal operation by means of a stab incision.

Method.

1. At the end of the main operation the appendix is palpated and freed from any lateral attachments so that it is supported by the mesentery alone.
2. A small scalpel is placed on the middle finger and palm of the left hand and inserted into the abdomen. The tip of the middle finger is applied to the inside of the right abdominal wall about 2 inches internal to the right anterior superior iliac spine at the level of the appendix base. The knife is then pushed through the wall forwards and slightly outwards by flexing the wrist and hand.
3. The knife blade is gripped by a small artery forceps and then pulled back into the abdomen, carrying with it the jaws of the forceps.
4. The knife is removed from the jaws of the forceps and the tip of the appendix is substituted for it. The forceps is then pulled out, followed by the appendix. It is important not to twist the appendix, and palpation of the meso-appendix will determine whether or no this has happened. I have found that most of the appendix comes out without severe pulling, and there is apparently no need to be afraid of using some force.
5. The mesentery is ligatured a quarter of an inch outside the skin and two sutures of silkworm-gut are passed through the skin and appendix wall to anchor the latter.
6. Finally, after closing the main abdominal wound, the appendix is cut off half an inch from the skin. A small catheter is introduced for several inches and tied in. The dressing is arranged so that the catheter comes through and is controlled by a clip.

Before leaving the table one pint of saline and glucose is run in through a funnel, and this is repeated hour after hour as long as may be necessary. Usually when conscious the patient resents the introduction of a whole pint at a time, and the best direction to the nurse is that she pour in the fluid at regular intervals until the patient complains.

I used this method first in 1912 in a case of perforated gastric ulcer. Seventeen pints were given in the first seventeen hours, and as the pulse had then fallen from 144 to 70 there was no need to continue. This patient did not ask for any drink by the mouth.

Since then I have used it in nine cases, of which only one has died. This was a gas infection of the liver due to gunshot wound in France. He died two weeks after operation.

My last case was an emaciated woman, aged 39, with hour-glass stomach, upon whom I performed hemigastrectomy. She vomited small amounts for two days, in spite of which her pulse fell from 100 to 72 in the first six hours and to 60 by the eighteenth hour. She did not complain of thirst. The quantities she received were as follows:

Intravenous infusion 1 pint.

	By appendix.	By mouth.
First day (in 7 hours) ...	3 pints	2 oz. (vomited)
Second day ...	4 pints	12 oz. "
Third day ...	4 pints	23 oz. (retained)
Fourth day ...	6 pints	20 oz. "
Fifth day (12 hours) ...	3 pints	24 oz. "
Total ...	20 pints	3 pints 7 oz. retained

No attempt was made to give a maximum quantity on each occasion.

When the appendix stump is no longer required it is treated according to the amount of sloughing present. In two cases a touch of silver nitrate was required to close it. In the rest boric fomentations or wet dressings were used for a few days. In no case was there any real trouble, the track being evidently shut off early by adhesions and granulation tissue.

The chief points about this method are as follows: There is none of the intolerable thirst so common after severe abdominal operations. The pulse slows quickly and the blood pressure rises. There is very little restlessness. The skin is moist, the mouth and tongue are clear and moist. The kidneys act well. Peristalsis is markedly stimulated. Incidentally the appendix is eliminated; with regard to the frequent presence of chronic disease in the appendix this is important. The patient is fed without disturbance, whether awake or sleeping. There is no futile coaxing of the rectum to fulfil the functions of the colon, and the stomach is allowed to rest.

THE TECHNIQUE OF ADENO-TONSILLECTOMY.

BY

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It appears to be generally agreed that if a tonsil has to be removed this should be done completely. It is often impossible to decide whether the tonsil is healthy or not. In markedly diseased tonsils the diagnosis is not difficult, but this applies only rarely to children, from whom 50 per cent. of tonsils are removed for reasons of size and because they give rise to more or less difficulty in breathing. I believe, however, that after the age of 5 nearly all tonsils are useless, and are in most cases a danger to the child's health at that time or later.

Enucleation with a guillotine seems to be the best method, and I have consistently used it since 1910. During a visit to Newcastle in 1908 I saw operations with the reversed guillotine for the first time, but being then in general practice I did not attempt it myself. While on a voyage to South Africa in 1910 I spent an hour daily in the study of Ballenger's description of Sluder's method, and on beginning ear, nose, and throat work in Johannesburg I employed this method, using no other in children under the age of 13. The usual guillotines had not then been reinforced, but within a few months Down Bros. and Mayer and Meltzer produced two very serviceable guillotines, though with the drawback, in my opinion, that the blades had dagger points. Then came Ballenger's handle guillotine—a very satisfactory instrument, now extensively used. This was followed by O'Malley's square blade, which impinged on a blade of soft metal when pressed home. Later came the Elphick pattern, with the crusher and blade; following this was Howarth's double blades, one blunt, one sharp, and a variety of other patterns in America, including those of La Force, Beck, and Sluder. For some time I used the La Force pattern with considerable success. With any of these guillotines I should say that 90 to 95 per cent. of tonsils can be completely enucleated. But there remain 5 per cent., which include the long, flat tonsil; the small buried tonsil glued to the pillars, especially the anterior pillar, as the result of frequent tonsillitis; and tonsils which have been previously operated upon.

Most of my tonsil operations during the last thirteen years have been performed under ethyl chloride anaesthesia. During a visit to America in 1921 I visited Sluder's consulting room in St. Louis, where I studied his original life-sized diagrams, which have now been incorporated in his book, and I often operated under his supervision. I thus learned that by following accurately the steps defined by him the 5 per cent. of impossible tonsillectomies soon dwindled to 1 per cent. The anaesthetic used was gas, and the guillotine was the Sluder pattern, of which there are three sizes. In this instrument the handle and shank are in one piece; the handle, somewhat oblong and very