A DRAINAGE TUBE FOR SUPRAPUBIC CYSTOTOMY, LIVER ABSCESS, AND ABDOMINAL CYSTS.

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CERTAIN recent cases of prostatectomy and the drainage of cystic cavities have suggested to me that an improvement might be effected in the pattern of drainage tube commonly in use, more especially for the former operation. The points in which this tube appears to me to be defective are the following; (a) There is no arrangement by which the length of the tube can be accommodated to the depth of the cavity; thus, in small contracted bladders its deep end frequently rests upon the trigone, or upon the wound made in removal of the prostate; it thus gives rise to continued oozing, discomfort, and delayed healing, while the upper end tends to sink into the dressings and allows of their becoming soaked if for any reason the Sprengel's pump becomes blocked or ceases momentarily to act. (b) The holes in the deep end are, as a rule, made much too small, and so are easily blocked by mucus or clot. (c) The deep end of the tube being closed, it is impossible to wash out the bladder without removing the tube; if removed early in the case it is often difficult to replace, especially in patients who are markedly obese. The tube depicted in the diagram has been made for me by Messrs. Allen and Hanbury, and will, I believe, be found a great improvement on the usual pattern. It consists of an outer tube (A) and an inner (B). The former is open at its deep end, and this

end has a vertical gap (c) on either side for the last inch of its length. The upper end is provided with a flat flange carrying two lugs by which it can be gripped by the finger and thumb, and in each of these lugs is a slot (g). Round the outer tube is fitted an automatic spring collar (d), carrying wire arms on either side; these arms rest on the abdominal wall, where they can be fixed by a narrow piece of strapping. The outer tube can thus be drawn out or pushed in through the collar, which grips it sufficiently tightly to permit of any desired length of tube being used in the bladder.

The inner tube (b), which fits the outer loosely, has three holes (f) on either side of its deep end, which correspond, when in position, to the vertical gaps (c) in the outer tube already mentioned; accuracy of position is ensured by the presence of two small studs (F) which fit into the slots in the flange of the outer tube. The inner tube is provided with the usual wine-filler mouth, and its deep extremity is closed by a smoothly rounded end. It is thus possible to remove the inner tube without disturbing the wound, and through the outer to wash out shreds, clots, and mucus, which frequently remain in the bladder for some time when the ordinary tube is used. The apparatus is made in three sizes, so as to allow of the narrowing down of the wound to a comparatively small diameter before the application of an Irving's drain, which, although excellent in its way, yet causes considerable maceration of the skin if used throughout the case. In association with Sprengel's pump I believe and hope that these tubes will prove of much assistance to surgeons and conduce to the greater comfort of patients.

They may also be utilized for draining liver abscesses; for this purpose the tube of the largest diameter may be made of any desired length and a trocar of suitable size may be fitted to it. The two being driven into the abscess cavity, the drainage tube is left *in situ*, and will be found

to overcome the common difficulty of kinking where rubber tube is used.

In cases of pancreatic and hydatid cyst they are also useful; in the former case they may be employed through a purse-string suture, the cyst wall being then attached to the abdominal wall, while in the latter they may be introduced after evacuation of the contents and removal of the membrane.

Memoranda : MEDICAL, SURGICAL, OBSTETRICAL.

MANIPULATIVE TREATMENT OF LOOSE CARTILAGE OF THE KNEE JOINT.

IN the course of conversation with a friend it transpired that some years before he had been troubled with loose cartilage in one knee-joint, and from his description of how he was afflicted there could be no doubt of the diagnosis. At the time he had the usual medical treatment, with no benefit. Finally, influenced by advertisement and recommendation of a then prominent Rugby football player, who had been similarly affected and cured by a bonesetter, my friend went to consult the same individual. The knee was subjected to severe and painful manipulation, and for some time afterwards was much swollen. But the ultimate result was so far satisfactory in that he had no more attacks of the severe pain, etc., which previously used to occur when "locking" took place in the knee joint.

The remarkable and noteworthy feature about that knee now is that it can be hyper-extended. This was another result of the manipulation, so that when "locking" disappeared hyper-extension stepped in. Thinking this over, the only conclusion I could arrive at was that the hyper-extension and the cure were both the result of the posterior crucial ligament having been ruptured by the forcible manipulation, leaving only one crucial ligament intact, and at the same time doing away with the possibility of the loose body "locking" at any time between the two crucial ligaments. I have not had the opportunity of verifying this theory on the cadaver, but, if it be correct, the treatment may be useful where operative measures are objected to.

I must also state that the knee I have been describing is, in spite of this liability to hyper-extension, in all respects as good as the other, whether for walking, running, jumping, kicking, or kneeling.

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TETANUS OCCURRING AFTER SURGICAL OPERATIONS.

MR. W. G. RICHARDSON published in the JOURNAL of April 17th, 1909, a paper on Tetanus occurring after Surgical Operations. I regret to have another case to add to those recounted in that paper and in subsequent letters from other surgeons. The case, however, differs in one important respect—namely, no catgut was used, the ligatures employed being silk and silkworm gut.

L. S., aged 60, Hindu, male, farmer, was admitted to the Civil Hospital, Belgaum, on June 22nd, 1909, suffering from digestive troubles associated with a ventral hernia half-way between the navel and the infrasternal notch. This hernia was easily reduced by the hospital assistant on duty. On June 26th the Mayo operation for radical cure was performed. At the operation boiled rubber gloves were used by my assistant and myself. Silk was used for the deeper parts of the wound, and silkworm gut for the skin.

After the operation there was some trouble with his lungs. On June 29th he complained of "burning pain" in the abdomen, and this lasted throughout. On July 8th, as abdominal pain was worse, the site of operation was examined. The wound was united, but under the union fluctuation was felt. On pushing in a probe a little thin fluid exuded. No complication being suspected, tetanus least of all, this was not particularly examined. On July 9th the abdominal pain was very severe—"like labour pains," the patient said. The wound was opened up and one of the deep silk sutures removed. On