

the outer part of the incision the third part of the axillary artery was exposed, ligated by two ligatures and divided between them, at a point just below where its aneurismal dilatation began, which was unfortunately just below the origin of the subscapular and circumflex arteries. Through the inner part of the incision the aneurismal sac was exposed, its anterior wall cleared, and then opened from end to end, and a considerable amount of clotted and fluid blood evacuated. The clot was yellowish brown in color, and was evidently beginning to disintegrate. The second and third ribs were found to have been bared of periosteum, and extensively eroded, so that they were almost worn through where the aneurism lay against the chest wall, a very thin bridge of rough, carious looking bone alone remaining. A sharp, projecting splinter on the second rib which was projecting into the sac was cut off with bone forceps and removed. The intercostal muscles had disappeared with the erosion of the ribs to which they were attached, and the thin, grayish-yellow, sloughy-looking pleura hung loosely between the eroded ribs, and flapped in and out with every respiratory movement. The empty sac and the wound were packed with sterile gauze, and the wound partially closed by sutures of silkworm gut.

The patient recovered well from ether, and there was no staining of the dressing until three days later, when the first dressing was done. The arm and hand, which were, of course, protected by cotton and a loose bandage, remained warm and of good color. The packing was removed from the wound and replaced. The wound above the clavicle had healed.

On April 3d, six days after the second operation, the hand became swollen and discolored; in the next two days the hand became gangrenous, the discoloration extending half-way to the elbow. On April 3d the temperature rose to 103°, and the pulse to 140, and there was occasional mild delirium.

On April 4th, as the conditions remained unaltered, Dr. Monks amputated the limb at the shoulder-joint by an internal and external flap. A moderate amount of venous oozing was controlled by ligatures, and the flaps, after thorough irrigation, united by deep and superficial sutures, drainage being provided for by gauze wicks. Considerable shock attended the operation, which was rapidly performed, but the patient recovered well under stimulation.

Six days after the operation the wound was dressed, and a localized area of suppuration evacuated by separating the flaps. There was a free purulent discharge from the sinus leading to the eroded and necrotic ribs.

The patient had seemed rather stupid and dull since the amputation, but after April 12th his mind became more clear. During the next few days a swelling appeared on the left side of the neck which was incised under cocaine anesthesia with a negative result.

In the next few days the swelling in the neck subsided, and the patient gained considerably in strength, sitting up every day.

By May 1st the patient was up and about the ward, the amputation wound was healed, and the sinus discharging very slightly. A slight cough then developed, and a little tenacious sputum was raised.

On May 13th Dr. F. H. Williams, who was called in consultation and made an x-ray examination, detected signs of the presence of fluid in the left chest,

which was tapped on the 15th, and thirty-nine ounces of serous fluid removed, with considerable relief to the patient.

On May 20th there was a marked rise of temperature and complaint of pain in the right side of the chest, and on the 22d dulness, bronchial breathing and increased vocal resonance and fremitus were made out.

On the 24th there had been noticeable improvement in the patient's condition. The mind was clear and strength so good that he sat up in bed. He lay down at about 5.30 p. m., and at 5.55 was found dead by the nurse. Death had therefore come suddenly and apparently without pain. No autopsy was obtained.

THE ABDOMINAL BANDAGE IN THE TREATMENT OF ENTEROPTOSIS.¹

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At the conclusion of a paper entitled "Enteroptosis as a Clinical Factor in the Diseases of Women," read in the spring of 1897, I stated that I had not settled to my own satisfaction what was the simplest and best form of abdominal bandage to use in the treatment of this condition. Although I have given the subject much consideration I do not feel sure that I am much nearer the settlement of the problem than I was then. Still I think that I have made out some of the conditions that must be complied with in order to have any success whatsoever in the use of the bandage.

Looking over the bandages to be found in the market the first thing that strikes one is that they are all made so as to conform to the soft portion of the abdomen, that is, they have a convex curve on the lower border. The result of this is that the bandage practically takes its real lower bearings over the anterior superior spines and the crests of the ilia. This tight band crossing about midway between the umbilicus and the pubes in many cases allows the prolapsed intestines to get down into the lower part of the abdomen, press down upon the pelvic floor and protrude the lower abdominal wall; or, in other words, instead of relieving the enteroptosis the bandage intensifies it. This takes place whether or not there are perineal straps. And this is why so many cases are unrelieved or made worse when they are simply ordered to go to the instrument makers and get an abdominal bandage.

Where there is no great prolapse of the pelvic floor, and where the abdominal walls are specially fat and heavy, such bandages give relief, but not where there is true enteroptosis and prolapse of the pelvic organs. To help this condition, the pressure must be so applied that it will be greatest immediately above the pubes. Therefore the lowest and tightest part of the bandage must pass directly round the body at the pubes, which will make the bearing to be taken just above the trochanters and below the crests of the ilia, and will bring the buckle in the back at the end of the sacrum or the very beginning of the natal fold. At first glance this seems very low, as if it might interfere with locomotion, but a short time given to observing the corsets exposed for sale in shop windows will show

¹ Read at a meeting of the Clinical Section of the Suffolk District Medical Society, February 16, 1899.

that many of them come fully as low as this and occasion no inconvenience. In fact, I have never had patients complain of this low bearing of the bandage. What does cause complaint, and is really very disagreeable, especially in hot weather, is the perineal band, which must be worn in practically all cases, so as to keep the bandage in place.

Glénard, who first called particular attention to the condition of enteroptosis, used for his bandage a broad band of elastic webbing with straps at the back and perineal bands, insisting that the elasticity was very necessary for good results. With this opinion I certainly agree, but do not think it necessary that the whole bandage should be elastic, but only so much as to allow freedom of motion.

I have found that however thoroughly and well explanations may have been given it will be necessary to see the patient a number of times and see the bandage in working position in order to get an idea of the faults and the changes which are necessary to put the bandage in condition to do satisfactory work. In fact, it is necessary to treat the bandage with as much respect, as, for example, the orthopedic surgeon bestows upon any of his pieces of apparatus, in order to obtain satisfactory results in the relief of enteroptosis.

Should it be necessary to get special pressure, as, for instance, beneath a floating kidney, I usually begin by using napkins and towels, until I find where it is necessary to place the pressure and how much padding is required. When this has been pretty well determined I have the patient or maker sew a pocket on the inner side of the bandage, with greater capacity at the lower part than at the top; this is then stuffed with upholsterer's curled hair and the upper part closed. Some cases require special devices for the support of peculiar internal conditions, and it often means very careful study of the case to determine just what form of support will give relief, but when once made out and the bandage properly applied the result will be worth the pains taken.

Medical Progress.

RECENT PROGRESS IN THERAPEUTICS.

BY ELLIOTT F. JOSLIN, M.D., BOSTON.

(Concluded from No. 18, p. 429.)

TANNALBIN.

TANNALBIN⁹ is a pale yellow, tasteless powder, containing about 50 per cent. tannic acid. It passes more or less unchanged through the stomach and is decomposed in the intestine, setting the tannic acid free. The remedy has risen rapidly in favor and no mention of harmful results has come to the reporter's notice. Vercluyette puts the minimum dose per day as 2 grammes (30 grains), and the maximum 4 grammes (60 grains), given in capsules for one to eight days. Stein has noted that if four to six grammes are without effect there is nothing to be gained by giving more of the preparation. He speaks favorably of it in chronic enteritis and intestinal hemorrhage.

Wesenberg¹⁰ has compared tannalbin, tannigen, tannoform and tannopin. He finds that under the

influence of pepsin 50 per cent. of the tannalbin, 70 per cent. tannoform, 20 per cent. tannopin and practically the whole of the tannigen remain unchanged. Tannigen is thus least changed in the stomach, whereas tannalbin is there most altered. As water does not break up the combination of tannopin and tannigen they have a less disagreeable taste than the other preparations. Tannoform is most quickly broken up in the alkaline intestinal contents; next comes tannalbin and tannigen and last tannopin. Tannopin is thus to be preferred in catarrh of the lower bowel.

Koelzer¹¹ has tested tannigen and tannalbin in fifty cases of infantile diarrhea occurring in Heubner's clinic. In a case of enteritis with muco-purulent hemorrhagic stools and in twelve puny children with chronic dyspepsia accompanying other diseases the two preparations were of no value. This was not the case if the children were fairly strong, the intestinal affections of recent origin, and severe constitutional disturbance absent. The action of the drugs was of the most striking value in fifteen cases of acute dyspepsia after the first symptoms due to the pathological decomposition in the intestines had been overcome. Often calomel or bismuth subnitrate were given simultaneously. Koelzer recommends the administration of the preparation for only a period of eight days.

GLUTOID CAPSULES.

In a communication upon the "Diagnostic and Therapeutic Value of Glutoid Capsules"¹² Sahli explains the method he has found in connection with Dr. Weyland for making pills insoluble in the stomach but soluble in the intestine. It is based on the fact that gelatin treated with formaldehyde is changed into a substance (glutoid) which resists HCl digestion, but is readily dissolved by action of the pancreatic juice. Up to this time no satisfactory means has been found to administer drugs by the mouth to the intestine without their exerting any action whatever on the stomach. Sahli encased various indicators, such as iodoform and salol, in a coating of glutoid or in glutoid capsules, and by testing for their absorption from time to time, both in laboratory and clinical experiments, proved that they passed the stomach unchanged, to be set free in the small intestine. By varying the resistance of the coating the pills will dissolve in shorter or longer intervals after their contact with the pancreatic juice. Knowing the time in which pills of a given consistency are dissolved in normal individuals, similar pills can be used to determine the condition of the digestion in invalids. Thus glutoid capsules promise to be a distinct aid in the diagnosis of pancreatic diseases. Finally, in the glutoid pills and capsules the means has been found to administer drugs to the intestine which have not been changed in their composition by the gastric juice, or, on the other hand, been injurious to the stomach.

ENEMATA IN CONSTIPATION.

Schellong¹³ recommends most strongly the use of enemata in the treatment of constipation. His directions to the patient are somewhat as follows: "Buy an irrigator of the capacity of half a litre and connect it with a No. 7 English rectal tube. Take the injection daily, choosing a time, usually, immediately on rising or after breakfast, even to the hour and minute at

⁹ Therap. Monat., 1898, p. 572.

¹² Dcut. Archiv für klin. Med., 1898, p. 517.

¹³ Schellong: Therap. Monat., 1899, p. 620.

¹⁰ American Year Book Medicine and Surgery, Gould, 1899, p. 935.
¹¹ Central. für Therapie, 1899, p. 65.