

In these seventeen cases there has been no recurrence of the transudation. In Hofmokl's case, however, some fluid collected again—a trial puncture preceded the laparotomy—yet the patient lived six months in comparative comfort.

All these cases were in women. In most of them the incision was made for diagnostic or other purposes. Doubtless the results thus gained are too favorable for an average, as successes of this kind would be much oftener published than failures. The patients' ages ranged from 4 to 57 years, mostly from 17 to 33 years. One patient (Well's) lived 10 years; others were alive and, from relapse four, two, one and a half down to one-fourth years after the operation. These results are denominated "relative cures."

The best results have been obtained by complete removal of the exudation and exact suture of the wound. The few treated by drainage were long bothered by secreting fistulæ. No difference is noted from the various ways of disinfecting.

In several of the cases the true nature of the trouble was confirmed by the microscope (bacilli, etc.). As yet there seems to be considerable difficulty in making a positive diagnosis before any operative interference.

Schwarz puts forth the following indications, where the diagnosis of peritoneal tuberculosis is certain, palliative incision is preferable to the customary puncture.

The transudation is to be removed as fully as compatible with gentle means, best by dry methods. This is to be followed by disinfecting toilet of the peritoneum and exact closure of the opening.

From analogy with surgical treatment of the various forms of tuberculosis, youthful age is no contraindication. Pulmonary affections, when not too far advanced, are rather indications for the operation than otherwise, since the diaphragm and hence respiration is thus relieved, and from experience such patients are then found to improve. Where the diagnosis is uncertain, exploratory incision is indicated.

II. On the Behavior of the Gut After Separation from Its Mesentery. By Dr. D. G. ZESAS. Since Madelung's refer-

ence to this matter at the German Surgical Congress in 1881 it has been the subject of considerable clinical and experimental study (vide e. g., *ANNALS*, 1885, July, p. 79) and withal of some dispute. Zesas treats of only the experimental side of the question. From experiments on rabbits Madelung asserted that on severing 10 to 15 ctm. of mesentery from large or small intestine without direct injury to the gut, gangrene of the whole piece of intestine whose vessels had been severed regularly followed. Rydygier in his first experiments on dogs found that the mesentery could be divided for some 3 ctm. without gut necrosis. He next separated a length of 4 to 5 ctm. in rabbits with fatal results like those of Madelung. A rabbit survived double ligature and division of a mesenterial artery pretty well away from the intestine. He next found that if in dogs a length of 9 to 15 ctm. be separated close to the intestine the latter necrosed. R.'s conclusions were: 1. The various classes of animals, probably from a differing vascular supply, are not equally tolerant of division of the mesentery. 2. The longer the separated part the greater the danger from gangrene. 3. The nearer the gut the more readily does gangrene develop.

Tansini investigated the different parts of the intestinal tract, and seemed to show that the large intestine was thus more vulnerable than the small.

Zesas gives fifteen own experiments on dogs and rabbits. He does not find so much difference in the various classes of animals, but that separation of the mesentery close to the gut always results in necrosis irrespective of animal species or part of the intestine involved. When the separation is far away from the gut no gangrene followed. The mesenterial arteries are not strictly terminal vessels. In the cadaver he divided the mesentery at various points and at varying distances from the gut. On injecting colored fluid into the abdominal aorta, it was seen that owing to the free anastomoses this reached the gut-wall at all points except where the mesentery had been separated close up to the intestine.

Conclusions: 1. In the undivided gut where the mesentery is separated close up to it, the corresponding part must be resected to avoid consequent gangrene. 2. Where the separation is 2 to 3 ctm. or

more away from the intestine it does not necessitate resection. 3. The longer the separated strip of mesentery the greater is the danger of gangrene. 4. Where the gut is severed, the mesentery must not be separated beyond the line of section, if gangrene at the point of section is to be avoided. 5. Division of the mesentery, when not adjacent to the gut, is equally well borne by both large and small intestine.—*Arch. f. klin. Chirg.* 1886, Bd. 33, Hft. ii.

III. Case of Pylorus Resection. By Dr. H. SCHRAMM (Lemberg). Woman, æt. 58 years. Stomach trouble for a year and a half. A fist-sized, hard, sensitive tumor, movable in all directions, was found at the level of the umbilicus. No ectasis of stomach.

Provisional to operating warm baths, laxatives, and for two days only fluid diet were given. Stomach thoroughly washed out with salicylic acid the evening before. Laparotomy. Cancer of pylorus, implicating the stomach more than the duodenum—together about 8 cm. Stomach and transverse colon firmly glued together; blunt separation of adhesions. After isolation of the affected part a four-cornered iodoform gauze compress was pushed under stomach and duodenum. Two corners were pulled up surrounding stomach and two around duodenum, thus closing the abdomen and preventing any soiling. A Wehr's compress was applied to both viscera and the parts step by step divided and tied together. The narrowing and uniting sutures consisted of four layers, for mucosa and mucular layer, then superficial and farther reaching Lembert's sutures in the serosa. Removal of compress. Iodoform to the suture line. Length of operation three hours. The carcinoma had ulcerated internally. No stenosis of pylorus. Uninterrupted recovery. Primary union. Left bed in twenty-five days. Two months po. o. her health was again good with no sign of relapse.—*Centbl. f. Chirg.* 1887, No. 12.

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TUMORS, ABSCESES.

I. A Postscript to the Cases of Echinococcus. By Dr. A. E. FICK (Cape Colony). Since the publication of the nine cases of echinococcus observed by the author (in Vol. 24 of *Deutsch. Zeitschr.*