

kidney relieved by drainage with the ureteral catheter as early as possible in order to spare the cortex from over-distention and destruction. The catheter can be left in place several days at a time. In some instances single catheterization has served to affect a prompt restoration of function, and also the patient's general health to normal. He believes that if this were done there would be far less destroyed kidneys and more full-term babies.

*Sterility Studies, with Particular Reference to Weak Spermatozoa; Diagnosis and Treatment.* V. D. Lespinasse, Chicago, Ill. The Journal of the American Medical Association, Vol. LXVIII, No. 5, February 3, 1917, p. 345.

In determining the cause of sterility of a given couple it should be considered under the following heads:

1. Obstruction in the sexual tract of the male. Semen contains no spermatozoa. The possible operations are vaso-epididymostomy, either with the vas and epididymis of the same side or the vas and epididymis of opposite sides; Lespinasse sac operation, resection of the vas and end-to-end union with the vas on the same side or with the vas on the opposite side.

2. Obstruction in the sexual tract of the female. Location usually the tubes or the cervix. Tubal cases are diagnosed by history of a disease known to cause obstruction and second by laparotomy. Treatment is surgical. Cervical obstructions are best treated by uterine insemination.

3. Absolute failure or imperfect development of the essential male elements. Diagnosis short viability time of the spermatozoa as shown by (1) slow motion and (2) shorter time during which they move. The normal rate of movement (always timing the fastest sperms) across the one-sixth field, No. 1 eye piece, is from five to eight seconds with semen one hour old and kept at body temperature the entire time. In the weak cases the length of time increases up to as high as 30 or 40 seconds. In some there is no progressive motion, simply a vibratile motion in situ. Treatment: General building up, glandular therapy and direct uterine insemination.

4. Absolute failure, or imperfect development, of the essential female elements. Diagnosis of ovulation failure is made by inference clinically or by direct inspection of the ovary at operation.

5. Alterations in the secretions of the female sexual tract so that her secretions are destructive to the life of the spermatozoa. Diagnosis is made in two ways: (1) The coitus test and (2) by mixing the secretions on the slide and examining from time to time.

*Resection of the Descending Colon and Rectum.* Frank H. Lahey, Boston, Mass. The Boston Medical and Surgical Journal, Vol. CLXXVI, No. 8, February 22, 1917, p. 275.

Free mobility, absence of metastases by palpation and X-ray, and absence of involvement of the neighboring organs, are absolute essentials before resection or amputation of the rectum should be undertaken.

Resection for diverticulitis is a dangerous procedure because of the infection present. Drainage with later resection, if necessary, is the safest form of treatment. Colostomy will occasionally be necessary.

Mobilization of the splenic flexure makes colectomy an operation not technically difficult.

End-to-end anastomosis in the large intestine is mechanically and functionally a better procedure than lateral anastomosis, because of pouching of the blind ends and because of the strain put upon them and the consequent danger of leakage.

The interlocking stitch of the author, published in the *Annals of Surgery* for 1910, is in his hands the safest and most satisfactory form of suture in end-to-end anastomosis of the large intestine. All other sutures constrict if pulled too tightly, or leak on account of epiploic appendages' not being caught in the grasp of the suture.

The making of a perineal anus prolongs the operation, increases the danger of slough, and increases the danger of recurrence.

The abdominal anus is best made near the umbilicus, where there is the least motion, and with a considerable redundancy of bowel upon the abdominal wall, so that a rubber ring does not slip over it.

The mortality of resections for trauma, such as lacerations and perforations of the bowel, will often be avoided by a temporary colostomy with secondary establishment of the fecal current.

*The Transplantation of Fat in Prostatic and Kidney Surgery.* Irvin S. Koll, Chicago, Ill. The Journal of the American Medical Association, Vol. LXVIII, No. 7, February 17, 1917, p. 536.

In the desire to use some means less mechanical than the various procedures suggested for the prevention of post-operative hemorrhage in suprapubic prostatectomy, nephrotomy and pyelotomy, this work was undertaken.

The experiments were carried out upon dogs. The kidneys were traumatized by crushing and lacerating and nephrotomized in various ways; also decapsulated, and fat from either the same animal or previously obtained from another dog was sutured or tied into or over the wounds. Some of the transplants were infected with colon bacilli and some with staphylococci. It was in every instance very striking to see how promptly the bleeding stopped. The kidneys were removed at periods following the operation varying from one day to six months.

On account of the anatomy of the prostate in the dog, the human prostatectomy could not be simulated. By making pockets out of flaps of the bladder wall it was possible to study the effect on fat transplanted into the bladder. In each instance the fat rapidly disintegrated and completely disappeared from these formed pockets.

The fat can be taken from the abdominal incision of the patient if he is sufficiently adipose, or, better still, obtained from a dog previously.

1. Fat is a valuable hemostatic following prostatectomy and in operations upon the kidney.

2. The change into fibrous connective tissue is complete in from three to four months.

3. Infection does not alter the metaplasia, though it delays it.

4. When placed over a decapsulated kidney, a new capsule is formed.

5. Incision into the healthy kidney is followed by extensive necrosis, which is replaced by fibrous tissue.

*Organotherapy in Gynecology.* Frank Benton Block and Thomas H. Llewellyn, Philadelphia, Pa. The American Journal of Obstetrics and Diseases of Women and Children, Vol. LXXV., Whole No. 471, March, 1917, p. 357.

This report is based upon the experiences of the authors with the use of internal secretory organic preparations in the treatment of various common gynecological disorders seen in the dispensary. Their experience with corpus luteum extract has shown that the preparation made from the cow is as potent as the one made from the sow. Small doses such as two grains, three times daily, are recommended in all cases where there are symptoms of deficient ovarian activity, such as hot and cold sensations, dizziness, headache, nervousness, etc., providing that there is still some ovarian tissue in the body. In cases where these symptoms are due to complete removal of both ovaries, large doses of corpus luteum will be required for relief of these distressing symptoms. In certain cases of chronic pelvic inflammatory disease, the combination of local treatment and organotherapy may be preferable to the operative treatment.

Thyroid extract has been used with some success as a stimulant to ovarian activity, being frequently substituted for corpus luteum extract on account of the expense of the latter. It has proven of unusual value in a few cases of delayed sexual development. Pituitary substance, in addition to its stimulating action on the uterine muscle, has a marked influence in counteracting ovarian secretion. Therefore it is of great value in checking uterine hemorrhage. In cases of menarchial hemorrhage, pituitary extract has acted almost as a specific.

The authors insist that each case must be studied on its own merits and frequently many combinations or preparations will have to be tried before the proper one is found.

*Intracanalicular Papilloma.* Edward Starr Judd, Rochester, Minn. The Journal-Lancet, Vol. XXXVII, No. 5, March 1, 1917, p. 141.

A study of 100 consecutive cases of discharging nipples. In 50 out of this number, a sero-hemorrhagic discharge was present; in the remaining 50 some other form of discharge was described. Carcinoma apparently is the most common lesion producing a discharge from the nipple. However, it was almost invariably associated with a tumor in the breast. Usually, the tumor was present some time before the discharge began. In 26% of these cases, chronic

cystic mastitis was present; 12 of them were in the first group of fifty, and 14 in the second. However, in some of our cases of chronic cystic mastitis, the discharge may have been from a duct papilloma, for often these tumors are very small and might easily be overlooked. This series seems to lend evidence to the contention that a hemorrhagic or sero-hemorrhagic discharge from the nipple in the absence of a palpable tumor is most often produced by a benign intracanalicular papilloma. In view of this fact, treatment should be conservative, particularly in young women. In older patients, especially if the condition is associated with chronic cystic mastitis, the mammary gland should be removed. If there are indications of malignant changes, a radical operation is advisable.

*Blood Pressure Changes Induced by Hot and Cold Applications Upon and Within the Abdomen.* Frederick S. Hammett, with the Assistance of E. W. Tice and E. Larson, Los Angeles, Cal. The Journal of the American Medical Association, Vol. LXVIII, No. 8, February 24, 1917, p. 621.

The experiments to determine the effect upon blood pressure of hot and cold stimuli locally applied were made on cats. The cats were anesthetized and the carotid pressure was recorded through a mercury manometer. The stimuli were calibrated and application made in such a manner that effects of pressure and other factors which might affect blood pressure were reduced to a minimum. Controls were run in all cases.

The application of heat externally to the abdomen produces a rise in blood pressure which returns to normal on removal of the stimulus.

The application of cold stimuli externally produces but slight change, any variation occurring being an increase in blood pressure.

The difference in effects of hot and cold stimuli is one of degree and not of kind.

In determining the effect of internal application, the abdomen was opened and the blood pressure allowed to return to normal before the stimuli were applied. The skin and cut surfaces were protected and the stimuli applied entirely within the abdomen.

With heat stimulation internally there is a preliminary rise in blood pressure of short duration followed by a decided drop below normal with another drop upon removal of the stimulus and a then gradual return to normal.

With cold stimulation internally there is also produced a marked drop in the blood pressure which gradually returns to normal on removal of the stimulus.

With the above facts in view, it is evident that hot or cold applications upon or within the abdomen produce marked changes in blood pressure. Any pack used within the abdomen during an abdominal operation should be at or near the temperature of the body, for a variation from this temperature tends to add to the shock of the operation.