

its lower one-third is performed; the leg is then rotated till the patella points forward. Immobilization then follows for one and one-half months.

If the adherent capsule be the obstacle to reduction, it should be loosened by (extra-articular operation) chiselling it from the periosteum and then reduplicating it by two stitches. This traumatic irritation favors reconstruction of the acetabular ridge. If the capsule has to be divided to facilitate reduction, author's specially constructed lever will be found of service. In instances where the acetabulum has to be hollowed out, the separated capsule should embrace the head of the femur and obviate absolute ankylosis. The incision favored to gain access to the hip is to be made along the anterior border of the tensor vaginæ femoris, and, if necessary, thence along the iliac crest dividing the insertions of the tensor vaginæ femoris, glutæus medius, and glutæus minimus. The wound is not to be drained, but completely closed. —*Zeitschrift für orthopädische Chirurgie*, Band ix, Heft 2.

MARTIN W. WARE (New York).

GENITO-URINARY ORGANS.

I. The Treatment of Prostatic Hypertrophy. By DR. E. GOLDMAN (Freiburg). A new method is herewith presented, which purposes to restore the anatomical relations of the bladder, and thus overcome the mechanical disturbances engendered by enlargement of the prostate,—viz., incontinence and retention. The bases of this operation are the observations of Waldeyer, that, if the bladder be fully distended, the urethra is shortened because of the arrangement of the muscular fibres that go to make up the internal sphincter, and which also give to the bladder a line of direction. When this line of direction is altered by overdistention, retention and overflow ensue.

To overcome these the author has planned at one and the same moment to lift up that part of the bladder which makes up the *bas-fond*, and also to widen the internal urethral orifice by

exerting traction on the anterior bladder wall and perform a ventrofixation of the bladder.

When punctio vesicæ was a very common procedure for the relief of retention incident to enlarged prostate, the improvement in subsequent urination was occasionally commented upon. A like benefit followed the practice of cystostomy. The author attributes the success in either instance to adhesions which sprang up between the bladder and abdominal wall about the site of puncture or cystostomy wound. These instances, in conjunction with two cases subjected to a "ventrofixatio vesicæ" which relieved the mechanical difficulties of enlarged prostate, substantiate the efficacy of this method. This operation is suited to cases free from cystitis and very early in the development of prostatic enlargement, at any rate before too severe a degree of atony has ensued.—*Beiträge zur klinischen Chirurgie*, Band xxxi, Heft 1.

MARTIN W. WARE (New York).

II. The Diagnosis of the Functional Power of the Kidney. By DR. L. CASPER (Berlin). Before performing a serious operation on a kidney, it is of importance to investigate, not merely if the other kidney is healthy, but if it is capable of sufficient work for the preservation of the patient. The functional power of the kidneys is measured by their products, the urine being gathered separately and simultaneously from both organs. The anatomical condition is shown by the presence of pus, albumen, casts, red corpuscles, and micro-organisms. There are three methods of learning the functional power of the kidneys, viz., the amount of secretion in a given time, the freezing point of the urine, and the amount of sugar secreted after a subcutaneous injection of phloridzin. The freezing point measures the molecular concentration of a fluid; the greater the number of molecules dissolved in a fluid the lower is the freezing point below that of distilled water. The greater the number of molecules which the kidneys abstract from the blood, *i.e.*, the greater the functional activity of the kidneys, the lower is the freezing point of the

urine. Normally, this point is one to two degrees below that of water.

It has been proved that phloridzin acts directly on the kidneys, and that, unless these are functionally capable, there will result no excretion of sugar on the administration of the drug. The author has demonstrated in the healthy that the urine from each kidney has practically the same freezing point, and the same amount of sugar is excreted after the administration of phloridzin. In disease all these three factors are lowered on the affected side.

The author believes that the above method of examination combined with the older ones permit a more exact diagnosis in renal diseases and a more reasonable prognosis in the case of operation.—*Verhandlungen der deutschen Gesellschaft für Chirurgie, Centralblatt für Chirurgie*, July 20, 1901.

JOHN F. BINNIE (Kansas City).

III. Results of Castration for Tuberculosis Testis. By DR. E. HAAS (Tübingen). The material which is the basis of this article comprises 111 cases of tuberculosis testis,—forty-four right-sided, thirty-four left-sided, fifteen bilateral castrations, and eighteen instances in which castration of one testicle was followed by castration of opposite side at a later period. Each operation was radical in the sense that a large piece of vas deferens was resected. No trust is placed in the less radical procedures of resection of the epididymis, since macroscopic exploration of the testis cannot reveal tubercles so minute in the testis as almost to evade detection by the microscope. Clinical experience furthermore has proven that in all cases where the epididymis was diseased longer than two months an affection of the orchis coexisted. Therefore castration is the best therapy for tuberculosis testis, and the burden of proof rests with the advocates of resection of the epididymis that the latter is a better procedure. The conclusions of the author are that this affection is most common in the third decade of life, during the acme of sexual activity. Cold and traumatism were responsible factors in 16.5 per cent. of

the cases, and but 5 per cent. of the cases bore any relationship to an antecedent gonorrhœal epididymitis. Cases with kidney and bladder complication offer a bad prognosis as regards both cure and viability. Twenty-six per cent. of the cases were afflicted with tuberculosis of other organs. Simultaneous involvement of both testes is rare, occurring about 3.5 per cent. Sooner or later the opposite testicle becomes diseased in 38 per cent. of cases. The chances of invasion of the orchis increase with the duration of the disease. Even after unilateral castration the remaining testicle becomes diseased in 26.7 per cent. of the instances. Among the cases of unilateral disease, one-sided castration effects a permanent cure in 44.6 per cent., whereas bilateral castration for disease of both testicles offers a permanent cure in 56.7 per cent. With unilateral castration sexual potency is maintained, and in none of the instances of bilateral castration were any of the much talked of somatic changes brought on. After unilateral castration, 20 per cent. die within the first three years, particularly of urogenital tuberculosis, 9.2 per cent. Following bilateral castration, the mortality is 40.6 per cent. for the first three years. Thus the mortality within the first three years is greater for bilateral than for unilateral castration, but after the lapse of three years more cases of double castration are cured than where unilateral castration is practised.—*Beiträge zur klinischen Chirurgie*, Band xxx, Heft 2.

IV. The Surgical Treatment of Renal Tuberculosis. By DR. O. SIMAN (Heidelberg). Thirty-five cases operated by Czerny, subjected to a critical analysis, confirm in the main well-established facts, that renal tuberculosis is more commonly unilateral, with greater frequency encountered in women, and the maximum number of cases occur between the ages of thirty and forty. Hereditary taint, tuberculosis of other organs, and gonorrhœa dispose towards its occurrence. The pathological classification of Israel is endorsed.

(a) Caseous disease of the kidney with disease of the capsule.

(b) Primary ulceration of the papillæ jutting into the pelvis.

(c) Numerous miliary tubercles scattered about the kidney parenchyma.

The first is the most common form, represented by thirty cases in this series. The second variety was not at all encountered. The last variety, usually being an accompaniment of general miliary tuberculosis, is bilateral, and not amenable to operation. In one instance only curetting of the superficial tubercles was resorted to. Complications of the entire urinary tract were encountered in varying degree. The kidney—capsula propria—offered all the changes peculiar to the life history of the tubercle,—caseation, fatty degeneration, sclerosis. Lymph glands at the hilus were affected in one case. A very frequent complication is disease of ureter in thirteen instances, and the bladder in the same number of instances. The genitals were only twice afflicted. In combined vesical and renal tuberculosis, the hæmatogenous or urinogenous origin, *i.e.*, the descending or ascending course of the malady, is difficult to establish. The average urine was cloudy and acid, containing no more than 1 to 2 per cent. albumen. In 27 per cent. of the cases, tubercle bacilli were found. The symptoms most commonly encountered embraced renal pain (twenty-five); cloudy urine in all; a tumor was to be felt in twenty-seven cases; initial hæmaturia, thrice; albuminuria, twenty-nine times; tenesmus, seven times. Where, as in most instances, a careful study of the cases enables one to establish the diagnosis of renal tuberculosis, the cystoscope is of incalculable value in throwing much light on the local conditions, and when ureter catheterization of the opposite kidney is possible, the gain is great.

Treatment.—Internal medication only becomes of great value when supplementing surgical procedures. The incision (Czerny) was transverse. Nephrostomy was performed six times. Opera-

tive mortality, 0 per cent.; subsequent death, four (57 per cent.); cured, 4.5 per cent.; improved, 13.6 per cent. Eleven times primary nephrectomy was performed, secondary nephrectomy sixteen times.

Most of the times the capsule was left behind. For the pedicle the rubber ligature was abandoned and replaced by silk. Where possible, the ureter was resected for a short distance. Out of twenty operated cases, results, 59.2 per cent., sixteen patients were cured and seven improved. The operative mortality of primary nephrectomy is 18.1 per cent.; that of secondary nephrectomy, 6.02 per cent. Comparing 59 per cent. cures of nephrectomy with 4.5 per cent. cures in nephrostomy, it is self-evident that the former is preferable; but the latter is indicated when the kidney is converted into a pus sac, and if the kidney be secured by adhesions; if the opposite kidney be diseased or absent and when cachexia is marked and the diagnosis uncertain. A primary nephrectomy is the ideal procedure if the disease be early recognized. It implies one operation, one narcosis. The total result of thirty-five cases is, seventeen (48.5 per cent.) are living, thirteen (37 per cent.) cured. This latter figure could be raised to 68 per cent. if the cases that lived but three years were included, as well as those dead from associated tuberculosis elsewhere.—*Beiträge zur klinischen Chirurgie*, Band xxx, Heft 1.

MARTIN W. WARE (New York).

RECTUM AND ANUS.

I. Retrograde Dilatation of Inflammatory Rectal Strictures. By DR. VICTOR LIEBLEIN (Prag). **II. Exclusion in the Treatment of Rectal Strictures.** By DR. HERMANN SCHLOFFER (Prag). The former procedure is applicable to such rectal stenoses non-malignant in character which are impervious to bougies introduced from the anus. Before any extensive resection for impervious stricture is undertaken an artificial anus is made. The bougie is guided into the stricture by placing