Kolle, have undertaken to determine whether human and bovine strains of tubercle bacilli may be differentiated by their varying virulence to guinea-pigs. The procedure they have employed consists in shaving the skin of the abdomen and then rubbing a measured quantity of the infectious material into the skin for two to three minutes, using a glass rod. With ordinary care the skin may be shaved so that there are no abrasions visible on inspection with a hand lens. The material they used for inoculation was obtained from various sources, that is, human tuberculous cultures, sputa, urine, and cavity contents, and bovine tuberculous cultures and glands. Tomarkin and Peschie found that the great majority of animals inoculated with human material remained healthy (of 52 guinea-pigs only 7 developed tuberculosis), whereas all animals inoculated with bovine material—whether cultures or diseased tissues—developed tuberculosis of the regional lymphatic glands and, later, generalized tuberculosis (26 guinea-pigs in all). They noted further that in none of the animals did local signs develop at the site of inoculation. Whenever infection occurred, the regional lymphatic glands were first enlarged. This striking difference in infectivity Tomarkin and Peschie attribute to variation in virulence of the two types for the guinea-pig. The study is being continued.

SURGERY

UNDER THE CHARGE OF

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The Reinforcement of the Pelvic Suture in a Pyelolithotomy by a Pedunculated Flap from the Fibrous Capsule of the Kidney.—PAYR (*Zentralbl. f. Chir.*, 1912, xxxix, 1505) for several years has been restricting the operation of nephrolithotomy in favor of pyelolithotomy. It is becoming established that it is best to adapt the operation to the individual case rather than to employ one method for all cases. Factors which will determine the operation to be done are: The situation, size, and number of the stones present; the topography and size of the pelvis of the kidney, since in some cases inflammatory changes about the kidney prevent its being delivered; the presence or absence of an infection of the calculous kidney; and whether a unilateral or bilateral lithotomy is necessary. The objections to a nephrotomy are, chiefly, the anatomical and functional damage done to the organ, and a dangerous hemorrhage which may call for a nephrectomy. The chief objec-

tion to a pyelolithotomy is that, occasionally, the wound in the pelvis gives rise to a chronic fistula. A second objection is that the exposure and removal of the stone embedded in the calyces and parenchyma of the kidney are faulty. These difficulties, however, are experienced with a nephrotomy. After the latter operation, extensive infarction and necrosis may occur with considerable reduction in the functional value of the organ. In the greater number of pyelolithotomies, smooth healing occurs. It is very likely that in the earlier cases an overlooked stone in the lower segment of the ureter, was responsible for the persistency of the fistula. Strictures and kinking of the ureter favor it also. When a pyelolithotomy is done for the removal of the stone, in approximately aseptic cases, the wound in the pelvis should be closed immediately with an exact as possible continuous suture. This necessitates a certain degree of mobility of the kidney, so that it can be brought into the wound. It is frequently recommended to suture the pelvic wound in two layers, and to cover the wound by suturing over it the surrounding fatty and fibrous tissue. But under normal conditions the material is not suitable for such a procedure, while in the presence of inflammation or abscess, it will be much worse. In several cases Payr has employed a flap of the fibrous capsule of the kidney to cover over and reinforce the suture of the wound in the pelvis. In one case there were one large and several small renal calculi in the right kidney. The urine was purulent, and the right ureter was inactive, chromocystoscopically. The walnut-sized stone was delivered with some difficulty, and a projection on it produced a small perforation in the very weak pelvic wall, to one side of the longitudinal incision. After the removal of the remaining calculi and cleansing of the cavity, the incision was sutured in a double layer (catgut and silk), and the sclerotic and irregular fatty tissue was brought over the lateral perforation. A large right-angled flap of the fibrous capsule, of two finger's breadth, with its pedicle at the hilum, was lifted and turned over on the pelvis, and beginning of the ureter. It was made to apply itself around them, and was fixed in position by a number of fine cat-gut sutures. Notwithstanding the unfavorable inflammatory conditions for making the closure water-tight, healing occurred without leakage and without reaction. The patient left the hospital in twenty-one days.

The Principles Underlying the Surgical Treatment of Gastro-intestinal Stasis, Due to Causes other than Stricture or Ulcerative Conditions.—COFFEY (*Surg., Gynec., and Obst.*, 1912, xv, 365) presents an exhaustive study of this condition. He says that there is a direct relation between gastro-intestinal stasis and abdominal ptosis, which is purely physical and mechanical. Mechanical obstructions always occur at the point of junction of a fixed and movable part of the intestinal tube, except when due to inflammatory adhesions. In 20 per cent. of human beings the ascending and descending colon have a mesentery like that of the quadruped, except at the flexures where the colon is usually attached to the front surface of the kidneys. In these defective persons the colon, instead of resting on a shelf or decline above the psoas muscle, is suspended by a direct drop from the kidney. All cases of floating kidney, mobile cecum, and general