usual bed-side measures. In less acute cases operation should also be resorted to at once, but here there is time for simple procedures which are not shocking, and, as the biliary tract is at fault, the operation should be directed to the removal of stones from the gall bladder or the ducts and drainage if there is any indication of infection, whether or not calculus is detected. In the author's 16 cases cholecystostomy was done in 11 with 3 deaths, cholecystostomy and choledochostomy in 2, both recovering, and in 3 cases in which the bile tract was untouched two died and one recovered. One patient collapsed on the operating table, before anything but the abdominal incision had been made. Cholecystectomy, although providing greater security against recurrence, is not advisable in these cases, as immediate results are here also all that can be considered, the future must be allowed to take care of itself.

In chronic pancreatitis cholecystectomy is the operation of choice; obstruction in the common duct may be corrected by prolonged drainage or choledochoduodenostomy. In doubtful cases prolonged drainage may be obtained by leaving the gall bladder, sewing it to the parietal peritoneum and marsupializing it. Common duct drainage may lead to stricture, although the occurrence is rare.

Trifacial Neuralgia: Its Treatment by Alcohol Injections of the Second and Third Divisions at the Foramina Rotunda and Ovale. R. L. Payne, Jr., Norfolk, Va. Virginia Medical Semi-Monthly, Vol. XXI, No. 21, February 9, 1917, p. 521.

This operation is fraught with many serious possibilities and should never be attempted by one without first making careful anatomical studies and thoroughly familiarizing himself with the various technics and methods of approach. On the other hand, it is an operation, when properly executed, which affords relief in cases of trigeminal neuralgia that is little less than marvelous.

The author's experience with alcohol injections covers a list of thirty-odd cases in which he has found the procedure applicable and withal quite satisfactory. The youngest individual so treated was 42 years old, while the oldest was 84.

So far he has been fortunate enough to escape any complications following this treatment, but the method is not free from possible danger. Deafness following the accidental injection of alcohol into the Eustachian tube has been reported and corneal ulcers with keratitis are prone to follow too complete destruction of the ganglionic cells. These complications are not to be compared, however, with the original suffering and patients with *tic douloureux* are usually quite willing to take any chance for the sake of relief.

Only one fatality has been reported in the literature, and when the procedure is carried out by one familiar with the technic there is offered to the patient a means of relief which can hardly be compared with the major surgical procedure of Gasserectomy. The removal of the ganglion necessitates a major cranial operation under a general anesthetic and results in a lasting scar

with the possibility of permanent brain injury. It is often followed by hemiplegia, loss of mental ability, keratitis and facial palsy. The author, therefore, believes operation should never be offered these cases until deep alcohol injections have been given a thorough trial.

Greek and Roman Surgery. W. C. Borden, Washington, D. C. Virginia Medical Semi-Monthly, January 12, 1917, p. 480.

The surgery of the early Greeks, like that of all primitive people, was confined to arresting hemorrhage by pressure, the extraction of foreign bodies, crude bandaging, and primitive methods of adjusting fractures. Finally there appeared Aesculapius, who, as his memory became obscure by antiquity, was deified as the God of Medicine, and his descendants, the Aesculapids, became the priests of his temples and the practitioners of medicine in Greece.

From such ancestry, Hippocrates was born about B. C. 460 and became the great exponent of Greek medicine and surgery. He lived in the golden age of Greece, when in art, in architecture and in literature the Greeks reached their pinnacle of attainment. His writings are encyclopedic and appear to cover all that was then known of medicine and surgery.

The Greek surgery of Hippocrates and his followers was advanced and furthered by the great philosopher, Aristotle, who, the son of a physician, the pupil of Plato and the tutor of Alexander the Great, formed one of the chief links which connected the Greek practices with that learning which was carried from Greece to Egypt by the conquests of Alexander and founded the great Alexandrian school under Alexander's successors, the Ptolemies.

The mingling of Greek and Egyptian medicine and surgery gave rise to those advances which were later to be carried to Rome. Rome had been gradually fighting her way to universal empire. Greece and Egypt passed under Roman domination, and Rome, the great absorber, gathered to herself and utilized the religion, the arts and the philosophies of her subjugated provinces and took over medicine and surgery from Greece and Egypt which in Rome was later elaborated and correlated by Celsus and Galen.

Prior to the invasion of Greek and Egyptian learning, Roman practice was that of the most primitive people. Cato, the Elder, about 200 years B.C., advocated cabbage as a universal remedy and treated dislocations by absurd and meaningless expressions and magic songs.

Claudius Galen, whose writings ruled the medical world for nearly 1,500 years, was born in Permagos, A.D. 131. He studied in Greece and Egypt and afterward settled in Rome, bringing to that city his accumulated Greco-Alexandrian knowledge.

The era of Roman surgery ended with Paulus of Aegina, A.D. 650. His sixth book is entirely devoted to surgery. It is the most complete system of operative surgery which has come down from the ancients and brings the whole surgery of the ancient world to a focus.

In the art of surgery, developed by the Greeks, even the simplest procedures were hampered by lack of anatomical and physiological knowledge.

As great as were the Greeks in art, in architecture, in literature and in philosophy, their mental trend was toward the perfection of externals as shown by their art, and toward philosophic theorizing as shown by their philosophy, rather than toward investigating the underlying facts in nature. The surgery of the Greeks, amplified in Egypt and carried into Rome, was a mixture of empiricism and philosophical theorizing, and the healing art remained in this condition until after the middle ages research and the development of science laid the foundation for a rational superstructure of practice.

Recurrence of Gall Stones. John B. Deaver, Philadelphia, Pa. American Journal of Surgery, Vol. XXXI, No. 2, February, 1917, p. 17.

In a series of close on to 1,200 operations in six years for the relief of gall stones or biliary conditions, Deaver finds that recurrence takes place in about 4.7% of the cases. The most common causes of recurrence after cholecystectomy are stone or stones in the gall bladder, adhesions, and stone or stones in the common duct. Less frequent causes were found to be stricture at the papilla of Vater, biliary fistulas, internal and external, interstitial pancreatitis, and pancreatic lymphangitis. Only four of the recurrences took place after a cholecystectomy: two for stricture of the pancreatic portion of the common duct or the duodenal orifice, and one each for stone in the common duct and post-operative fistula. This argues favorably for the more radical operation, especially as the operative risk of the two operations, cholecystectomy and cholecystostomy, other things being equal, is about the same, i. e., between 8 and 9%.

In addition to the failure to remove all the stones at the primary operation, a number of cases showed renewed infection as the cause of the recurrence. This adds emphasis to the plea of the surgeon for early operation in gall bladder conditions. In long-standing cases the ducts become dilated and stones lodge in the recesses so that it is impossible to detect or to remove them all at the first operation. Renewed infection and the constant irritation is also apt to lead to malignancy. This is supported by the fact that about 85 to 94% of primary, and only 15 to 16% of secondary, carcinomas of the gall bladder are associated with gall stones, thus indicating that gall stones are the cause and not the result of carcinomatous degeneration. Other results of neglected gall stone cases are myocarditis, kidney degeneration, as well as degeneration of the blood vessels, diabetes, hematogenous infection, etc.

Disease of the biliary passages is essentially surgical and the most common cause of recurrence is late operation.

Gonorrheal Lymphangitis of the Penis. J. U. Reeves, Mobile, Ala. American Journal of Surgery, Vol. XXX, No. 12, December, 1916, p. 492.

Gonorrheal lymphangitis (called "bull head clap" by the laity) is the most troublesome and frequent form of penile lymphangitis. It most often occurs between the onset and fifth day of the discharge from the meatus, and is characterized by edema and swelling of the loose skin

forming the prepuce, eversion of the meatal lips, with reddening of the surface of the glans and skin of penis involved. The severity of this condition depends upon the length of time it has been allowed to progress plus encouragement the patient has given it by the use of astringents, etc., to retard the already inadequate drainage.

The cause is the absorption of toxins from gonorrheal pus due to improper drainage from the anterior urethra caused in most cases by (1) an abnormally small meatus size of 20 French and under, (2) vigorous use of astringent injections, or (3) coitus while suffering from an acute anterior urethritis.

Treatment should be directed toward establishing drainage and lessening the severity of the urethritis. Mentotomy should be performed if pressure caused by the edema will not interfere with keeping the incision open, making the meatus as large as 25 French at least. Should the edema be too severe to allow the wound to be kept open with pledgets of cotton, direct your treatment to internal antiseptics in connection with local treatment. Instruct the patient to drink large quantities of water.

If patient can not go to bed, suspend penis with a "T"-bandage until the acute symptoms disappear. Have patient get all benefit possible from moist heat. Refrain from giving sedatives to control pain and troublesome erections, as they encourage epididymitis.

Preliminary Treatment for Prostatectomy in Unfavorable Cases. Hugh H. Young and William A. Frontz, Baltimore, Md. The Journal of the American Medical Association, Vol. LXVIII, No. 7, February 17, 1917, p. 526.

Prostatic hypertrophy is frequently complicated by conditions which render immediate operation extremely dangerous; and the present low mortality following prostatectomy is due, in large part, to timely recognition of these factors and the institution of appropriate treatment for their correction. The risks from a clinical standpoint may be classified as renal, cardiac, cardio-renal, hypertensive and infectious. The renal risks are by far the most frequent and are secondary, as a rule, to urinary back-pressure and infection. The determination of the operative risk from the standpoint of renal efficiency requires an accurate knowledge of the functional capacity of the kidney; and in securing this information, the phenolsulphonephthalein and blood-urea tests have proved eminently satisfactory. The preliminary treatment in this type of case is usually directed toward the relief of urinary retention, and catheter drainage of the bladder is the rule. Water is forced in large quantities, the diet is carefully regulated and urotropin is given as a routine measure. Repeated phthalein tests usually show a gradual improvement in renal function, and when this becomes stationary, operation can be carried out with little risk from the renal standpoint. The cardiac and cardio-renal cases frequently require prolonged study and the improvement is often extremely slow. With rest in bed, digitalis, regulations in diet, etc., the condition usually improves to a degree rendering safe operation possible. The role played by infection in prostatic hypertrophy is an important one, and in 60% of our cases, urinary