cyst was loosely connected with the kidney and could be peeled off and had caused only slight pressure atrophy of the renal substance. Experience with this condition is limited, since simple serous cyst of the kidney is an extremely rare lesion. In such a case the abdominal extraperitoneal method has much to recommend it, especially in these cases in which the diagnosis is uncertain.

Stated Meeting Held November 3, 1924

The President, DR. E. B. HODGE, in the Chair

REMOVAL OF SCREWS AND PLATES AFTER INSERTION IN BONE

DR. A. P. C. ASHHURST read a paper with the above title, for which see page 528.

THE RELIEF OF PAIN IN CARCINOMA OF THE FACE

DR. FRANCIS C. GRANT presented a paper with the above title, for which see page 490.

DOCTOR ASHHURST said that in these cases he occasionally injected the branches of the fifth nerve for pain in the face, but when inoperable carcinoma occurs in the neck, the only thing he had done was to burn the greater part of the carcinoma off. Doctor Fay has divided the upper cervical roots intradurally and thus relieved the pain in the neck. But cautery excision is a simpler procedure. When one takes off the top of a carcinoma of this kind the patients get immediate relief from pain and live in comparative comfort. The immediate relief of the pain is as striking as when a carbuncle is excised. But this relief does not last forever. The patients have an open sore, of course, but this can be radiated afterwards.

DR. GEORGE M. DORRANCE said that the method described by Doctor Grant had been used in Blockley Hospital for two or three years. He now had a case there who has had carcinoma of the jaw for seven years. He has had no recurrence of sensation since the injection. He thought the time during which they are free from pain following the injection is longer than that stated by Doctor Grant one year. He had seen one case which lasted eleven years after the first injection, another, nine years, and another seven years. On the other hand, he had seen a case in which sensation returned in nine months. However, this was quite exceptional. After an injection one should wait for several weeks to see whether the nerve had been really reached or whether the alcohol was merely injected around it. The duration of freedom of pain depends on whether one has gotten the nerve itself or only the area surrounding it. If, one month after injection, there is anæsthesia, the chances are it will last well over a year.

DR. FRANCIS C. GRANT rejoined that Doctor Ashhurst was quite correct in his statement that cautery excision of a malignant growth about the face will relieve the pain in some cases. In other cases, the pain is not relieved and in every case, no matter how treated, the repeated dressings are extremely painful. It is this suffering particularly, that may be relieved by the alcoholic

injections. These patients have suffered to such an extent that they dread the dressing of the wound, and it is difficult to keep up their morale sufficiently to have them willing to return for the proper after-care. If there is further after-treatment, such as the insertion of radium needles, that may be all done painlessly following nerve block.

As to cases in which the lesions lay below the trigeminal distribution, he mentioned a case treated by Doctor Fay, in which the posterior roots of the first, second, third and fourth cervical nerves of one side were cut within the spinal canal. The results in this case were brilliant. The operation is not a difficult one to those versed in the surgery of this region, and produced in this case complete relief. This suggestion of Doctor Fay's seemed to him to be highly practical and to afford a method for the relief of pain in malignant tumors of the neck.

As to relief following alcoholic injection which lasted for so long a period as nine years, he has not seen the relief, resulting from peripheral injection, last for as long a time in this series of cases, because sufficient time has not elapsed since injection—but it has been his experience with the peripheral injections for the relief in major trigeminal neuralgia that he has not been able to inject the peripheral nerves and have the anæsthesia last much longer than three years. Possibly, if one injects the ganglion itself, the relief may be more permanent.

THE TREATMENT OF SUPERFICIAL BURNS

DR. I. S. RAVDIN presented a paper with the above title, for which see page 439.

DR. JAMES H. BALDWIN said that in the matter of contractures and how to treat them, one of their greatest problems was presented by contractures of the knee, elbows, etc. He asked Doctor Ravdin what method he had used to prevent contractures. He noticed that none of his patients shown had any. All are more or less familiar with the Parker method—giving the patient anæsthesia, if necessary, and straightening out the joint, then covering the raw areas with Zno plaster, replaced twice a week. Next a gauze dressing changed daily, then a plaster splint to maintain extension. He had had some patients who had done well with this method; others had not. A great many of these cases were seen at the Methodist Hospital, where they were treated with wet salt solution dressings, and when pain had been relieved, they were put under the electric light. Just as in Doctor Ravdin's patients, they find the new skin soft and pliable usually, although somewhat discolored.

DR. HUBLEY R. OWEN said that these burns ought to be classified and treated as wounds. In bad cases of burn, one ought to do a débridement and not only that, but the dressings should be done under general anæsthesia. He had never tried local anæsthesia. When re-dressing is associated with great pain, it ought to be done under an anæsthetic. When any infection is present, the case should be treated as a wound, and if it is not too painful,

after protecting the skin and surrounding parts, Dakin's solution should be used rather than dichloramine-T.

DR. GEORGE M. DORRANCE remarked concerning the importance of sleep in these burn cases during the first twenty-four hours and the statement that if these patients do not sleep during the first twenty-four hours following the burn, they will die; that at the St. Agnes Hospital, where were received quite a number of burn cases, coming from the oil works, they had found this to be literally true. If the case sleeps for the twenty-four hours following the burn, he will usually recover. Since Doctor Owen called it to his attention three or four years ago, he had been dissecting out these burn wounds. In some cases he practised too much dissection and got into difficulties, but lately he had been drifting back to it again and think it is well to take a deformity rather than death.

DR. W. HERSEY THOMAS said that he had found it a helpful thing, not in very extensive burns, but in those involving portions of the extremity, to treat the cases as one would treat frostbite. He had kept them in a cold (?) water bath for twenty-four hours; it soothes the patients greatly.

DR. I. S. RAVDIN (closing discussion on his paper) said that in the case of second degree burns, he practised simple removal of the necrotic skin, which is a partial excision. In cases where there is charring, after twenty-four hours he practiced really a débridement, removing almost everything that has been injured by the burn. He emphasized the point that in sleep during the first twenty-four hours lies the hope of the patient. If one can carry them over the initial period of shock, they have a chance. If not, they will die of toxæmia.

Several years ago he had a case of a child in which two-thirds of the body surface was burned, who lived nearly sixty-seven days after débridement. The question in this case was that of making a skin graft over a large area and as the child was very young she practically died of exhaustion, because they were not able to skin graft her rapidly enough.

As to contractures, he had not said much in his paper, because the primary interest is in carrying the patient over the initial period of toxæmia, since eighty or ninety per cent. of deaths occur during that period. The thing to do to prevent contractures is to use a Thiersch or other graft with extension to keep the surfaces in proper position.

SPONTANEOUS RUPTURE OF GANGRENOUS URINARY BLADDER

DR. E. L. ELIASON presented a woman aged thirty years, who was admitted to hospital July 21, 1920, on account of pain in the lower abdomen, of two days' duration. Patient says she was well until two days ago, when she was suddenly seized in the morning with sharp abdominal pain. The pain was not confined to any particular part of the abdomen and she did not vomit until the next day, when she vomited several times. When admitted she was suffering from no pain, but her abdomen felt sore, particularly on the right side. She has no unusual urinary symptoms during this attack except the first day, when she was catheterized by her physician. She had a tuber-

culous right kidney removed five years ago at the Presbyterian Hospital and since then she has had frequency of urination, having to get up several times each night.

Inspection of the abdomen revealed slight rigidity in the lower right quadrant, especially in the rectus muscle, with tenderness over the lower abdomen on both sides, but chiefly on the right. Rectal examination shows a rather marked tenderness and a feeling of fulness on the right side. The uterus and adnexa appear to be slightly more fixed than normally. Temperature, pulse and respiration, 103.1, 124, 32. White blood-cells, 10,000. Urine analysis (catheterized specimen) loaded with white blood-cells.

Through a McBurney incision the abdomen was opened, disclosing a low grade peritonitis and an excessive amount of slightly turbid fluid resembling, in appearance and odor, infected urine. The appendix was delivered and found covered with exudate. It was removed and in the absence of interstitial inflammation, further search was made for the cause of the peritonitis. Examination in the pelvis revealed a walled-off mass covered by numerous knuckles of small gut, which were glued together by recent adhesions. Finger separation of these resulted in a gush of several ounces of fluid similar to that disclosed in opening the abdomen. Retraction disclosed to view a dark mass of tissue in the centre of which was a small opening discharging what proved to be urine. A midline incision was made and it was found that the sigmoid had become attached to this dark mass of tissue which proved to be bladder and was invaginated into the bladder in this way, attempting to plug off the gangrenous fundus. The small puncture wound existed just to the right of this invagination. By gentle manipulation the sigmoid was freed, and it was then seen that the entire fundus of the bladder was lifeless and necrotic, tearing when instrumental attempt was made to relieve the invagination. The gangrenous area was excised, which resulted in a removal comprising the entire fundus of the bladder down to the peritoneal reflection on the upper anterior aspect. The peritoneal edges of the abdominal incision were now sutured around the edge of what was left of the bladder, thus marsupializing this viscus. Drains were placed in both incisions and the wound partially closed. A permanent catheter was placed within the urethra.

Post-operative Notes.—The patient had a rather stormy career for a few days, but at the end of the third day her temperature dropped to 99.2 and pulse to 90. She continued to run an afebrile course for the extent of her stay in the hospital to September 27. Her wound gradually healed, leaving a small suprapubic urinary fistula, for which she was fitted with a rubber urinary receptacle. Some days later this fistula healed and the patient was discharged from the hospital. A subsequent history reveals the fact that her urinary fistula had returned and has closed and opened at various times. The woman has gained in weight from fifteen to twenty pounds.