TRANSACTIONS

OF THE

PHILADELPHIA ACADEMY OF SURGERY

STATED MEETING HELD MARCH 3RD, 1930

The President, DR. GEORGE P. MULLER, in the Chair

CALVIN M. SMYTH, JR., M.D., Recorder

OSTEOPERIOSTEAL BONE GRAFTS

DR. GEORGE M. DORRANCE read a paper with the above title for which see page 161.

DR. GEORGE WAGONER said that, since 1926, when he and Doctor Dorrance had done similar experimental work, he has had occasion to use the osteoperiosteal bone graft clinically. Several of his cases resulted in partial failure. The failures were due to the faulty preparation of the graft, there being areas in which bone chips were not adherent to the periostem. This was invariably found to be the case at time of re-operation, and, in Doctor Wagoner's opinion, explains the failures.

DR. ROBERT IVY said that his experience with bone grafts has been solely with the lower jaw and he has used the osteoperiosteal method and also the thick graft from the crest of the ilium. He feels that the osteoperiosteal graft is more useful in small defects on account of its simplicity. In a fairly long gap of two or three inches, the iliac graft is preferred, chiefly because it fills out the external deformity more satisfactorily. He agrees with Doctor Dorrance about the importance of fixation and immobilization in these cases.

DR. ASTLEY P. C. ASHHURST said that he thought that the first patient would have had a far better result with an ordinary excision of the knee-joint. He would have obtained his result in about eight weeks, although it would have been necessary to wear a brace for some time longer. The shortening accompanying this operation of excision is also an advantage, if the patient is to walk with a stiff knee, as it allows the heel to clear the ground in walking. In certain other locations, as in the shoulder, where the articular surfaces are smaller, the osteoperiosteal graft or some other extra-articular method of fixation should prove very valuable.

DR. GEORGE M. DORRANCE rejoined that he usually used excision, but that this man already had a short leg, and he wished also to avoid entering the joint and lighting up the old infection. He was sure that he has had better results with osteoperiosteal grafts than with full thickness grafts. It is a very simple operation, whereas putting a full thickness of graft in under the jaw is a formidable procedure. The last patient he operated upon

had had all the teeth removed, and it was a very simple procedure. That is what he is trying to bring out. The one patient shown surely proves that osteoperiosteal in the knees can be done.

WELCH BACILLUS ANTITOXIN IN INTESTINAL OBSTRUCTION

Dr. John P. North (by invitation) read a paper entitled, "The Use of Welch Bacillus Antitoxin in Intestinal Obstruction," for which see page 277.

Dr. Eldredge L. Eliason said about one year ago Doctor North and he investigated the mortality of acute intestinal obstruction in three hospitals. There was found to be the same as the average reported mortality of the country, approximately 30 per cent. There is a statement to the effect that in this country the mortality is actually nearly 60 per cent. C. Jeff Miller last year reported 343 cases taken from three hospitals in the South. He makes a statement that the mortality was between 60 and 65 per cent. rather than 35 and 40 per cent. This shows that there is still a very high mortality despite the fact that it is generally accepted today that dehydration and loss of chlorides on the one hand and toxemia on the other are the important factors. Replacement of chlorides by the administration of hypertonic salt solution and the relief of dehydration by large quantities of glucose have been extensively practiced for the last few years. The toxemia is another question. Much experimental work has been done and when William's report came they thought to attempt to confirm it. Doctor North had been unable to do this. It may be that the toxemia in dogs and human beings is not quite the same. Certain workers claim that dehydration and loss of chlorides in their dogs were responsible for their death and that they could find no evidence showing that toxemia had anything to do with it. So far, it has been impossible to attribute the cause of death in intestinal obstruction to any single factor and doubtless there is still much to be learned before definite conclusions can be drawn.

THE CONTRACTILE FUNCTION OF THE GALL-BLADDER

Dr. Isador S. Ravdin read a paper with the above title.

Dr. John H. Jopson remarked that this paper might better be discussed by a surgical physiologist rather than a clinical surgeon. The view that nothing which enters the gall-bladder through the cystic duct comes out by that route has been abandoned by practically all of its former advocates with the exception of Sweet and Halpert. They, apparently, have been left to hold the fort alone. From a purely philosophical standpoint, it seems incredible that nature would tolerate such an imperfect and complicated mechanism, designed for complete absorption of all bile entering it. Murphy and Higgins have demonstrated that, in animals in which experimental cholecystitis had been produced, the contractile function of the gall-bladder is restored when the cholecystitis clears up. Röntgenographic studies made after recovery showed normal behavior of the gall-bladder after the fat meal.

PERITONEAL ADHESIONS

DR. JAMES T. LACEY (by invitation) read a paper entitled, "The Use of Amniotic Fluid in the Prevention of Peritoneal Adhesions," for which see page 281.

DR. DAMON B. PFEIFFER said that he agreed with the proposition that when two peritoneal surfaces were brought in contact with each other and the endothelium survived, the adhesion was temporary, but if granulating surfaces were allowed to come in contact with each other the adhesions formed were permanent. In spite of the great variety of substances which have been used for the prevention of adhesions, nothing has changed their picture.

INTRAPERITONEAL PRESSURE

DR. RICHARD H. OVERHOLD (by invitation) read a paper entitled, "Observations on Intraperitoneal Pressure."

VESICAL NECK OBSTRUCTION

DR. ALBERT E. BOTHE read a paper entitled, "Pathological Study of Posterior Vesical Neck Obstruction," for which see page 300.

STATED MEETING HELD APRIL 7, 1930

RECONSTRUCTION OF AN ARM IN BRACHIAL PLEXUS INJURY

DR. BENJAMIN F. BUZBY reported the case of a man, aged forty-four, who, while at work on December 19, 1928, was struck by a falling plank and knocked down and then fell fifteen feet. He was admitted at once to the General Surgical Service of Cooper Hospital, Camden, N. J., wildly delirious. When admitted there was evident a laceration, four inches long, extending upward from the right eye-brow and a fracture of the right acromion shown by X-ray to be one of a simple transverse type. He had a marked concussion of the brain but an X-ray of his skull was negative. His scalp wound was cleansed surgically under an anæsthetic, his skull was inspected and no fracture discovered and the wound was sutured loosely and rubber tissue drainage inserted.

His previous medical history was negative.

Two days after admission he became rational and complained of numbness in his right upper extremity but as this was dressed at his side at the time for his fractured acromion no great attention was paid to it. Throughout the day a severe cellulitis of his face, neck and scalp became apparent, with a temperature range of 100.6° F. to 103° F. His scalp wound was opened at once and December 24, 1928, counterdrainage was established. The scalp was further drained on January 4, 1929, and again on January 24, 1929. During this period the man was very sick. His scalp wounds were entirely covered with dry crusts on February 6, 1929.

When the dressings were removed from his shoulder January 28, 1929, it was found that the man had no useful function in his right upper extremity. A neurological consultant at this time gave the opinion that the man had suffered damage to his cervical nerve root.

He was discharged from the hospital to the Out-Patient Neurological Service February 9, 1929, where he was found to have reactions of