TRANSACTIONS OF THE PHILADELPHIA ACADEMY OF SURGERY.

Stated Meeting, January 8, 1900.

The President, DE FOREST WILLARD, M.D., in the Chair.

SARCOMA OF INTESTINE IN CHILDHOOD.

DR. RICHARD H. HARTE submitted the following history:

A male child, aged five years, was admitted to the Episcopal Hospital on October 31, under the care of Dr. Fisher, with whom the reporter saw the child in consultation. The abdomen of the patient was greatly distended, was very tympanitic, and a distinct mass could be felt on the right side, particularly in the right iliac fossa; slight palpation gave a great deal of pain. On deeper palpation the mass could be felt extending from the right iliac fossa over towards the median line and slightly above the bladder. At times, after the bowels were moved, the mass could be distinctly outlined as two nodular masses about the size of two lemons, one in the median line, and one, as before stated, over the right iliac fossa.

The history, as well as could be elicited from the family, was as follows: About four weeks previous the abdomen was noted to be becoming distended; although there can be no doubt but that the trouble existed long before this and was not recognized. There was no jaundice, no flushing of the face; tongue red and moist; the chest signs were negative; heart in its normal position and action regular; abdomen greatly distended and tympanitic. Over the region of the spleen the splenic dulness was slightly enlarged, although it was with difficulty this could be accurately determined. On the right side of the abdomen was a mass which was distinctly tender, the tenderness increasing down in the right iliac fossa and over towards the median line above the bladder. The child lay with the legs flexed, and when the legs

were extended the pain was increased. When the bladder was distended with urine pain was increased, which was relieved on evacuation of the bladder. The urine contained a faint trace of albumen, with no casts.

The blood count made by Dr. Ghriskey showed the following: Leucocytes, 21,300.

A differential count which was made three days later showed: Polymorphous nuclear leucocytes, 66.6 per cent.; small lymph cells, 24 per cent.; large lymph cells, 9.2 per cent.; eosinophiles, 2 per cent.

While under ether and with the abdomen relaxed, the mass was very much more apparent, and could readily be outlined occupying a space towards the right iliac fossa and extending beyond the median line. An incision was made, which was followed by the escape of a large amount of discolored serum. The growth seemed to be rather cystic in character, although with hard and distinct walls. In one spot it was very soft and ruptured on slight pressure, with more escape of bloody serum.

It seemed very apparent that the case was inoperable, and that nothing could be done except obtain a small piece of growth for microscopic purposes, which proved it to be a lymphosarcoma of the small round-celled variety. The wound was closed, a glass drain inserted, and for a time the child's condition seemed considerably improved; but he ultimately died from inanition, apparently due to the growth breaking into the intestine and allowing the escape of its contents. A post-mortem was made, which revealed a large sarcomatous mass occupying a position starting apparently from the mesentery and involving a portion of the small intestine, the two ends of which seemed to enter the mass, allowing the escape of the intestinal contents through the opening externally, which is very apparent in the specimen. The reporter considered this to be one of those cases of so-called intestinal sarcoma beginning probably in the mesentery, although this apparently is a very rare variety, the intestinal form being more common.

Albion (*Des Fibromes Embryonnaires de l'Intestin chez l'Enfant,* Paris, 1898) has collected ten cases of intestinal sarcoma in children, all of which were of the round-celled variety. The disease occurs at all periods of childhood, and may not infrequently be of congenital origin. Its evolution is extraordinarily rapid, terminating fatally within two months after its apparent beginning. Heredity was noted in none of these cases. Direct traumatism was mentioned in two. The instances of metastatic foci in the viscera had been noted in three-fifths of the cases, in the liver and then in the kidney most frequently. The development of glandular metastasis in regions more or less distant from the primary focus had been noticed with equal frequency with the visceral metastasis, but in only one case was there general involvement of the lymphatic glands.

Again, Smoler (*Prag. med. Wochenschr.,* xiv, 1898), in discussing a series of thirteen cases of primary cancer of the intestines, thinks that they are always infiltrating in their character, affecting the entire intestine and increasing its size. They usually take up a considerable portion of the intestine. Histologically, they are sarcomata of mixed cellular type, although occasionally one sees a case that is lymphoid in character. Metastasis is frequent, affecting the lymphatic glands in the mesentery. The part of the intestine attacked was in seven cases the ileum, twice at its lower end and three times at the jejunum and ileum, and twice the cæcum, and in one case there was in addition an adenosarcoma of the pyloric end of the stomach. The majority of these cases were in the fortieth year.

RESECTION OF WRIST-JOINT.

Dr. William J. Taylor read a paper entitled "A Case of Resection of the Wrist-Joint by a Modification of Mynter's Method."

EXCISION OF THE WRIST BY A MODIFICATION OF MYNTER'S METHOD.

By WILLIAM J. TAYLOR, M.D.,

OF PHILADELPHIA.

At the eighth session of the American Orthopædic Association, held in Washington in 1894, Dr. Hermann Mynter, of Buffalo, read a paper upon excision of the wrist-joint by a new method, and described in detail an operation which he had performed some months before. This method had been suggested by Professor Studsgaard, of Copenhagen, in 1891, and consisted in making a longitudinal incision between the third and fourth metacarpal bones, and thus opening up the wrist-joint between the os magnum and unciform bones and between the semilunar and cuneiform bones. Both the superficial and deep palmar arches were cut, but easily ligated, in the wound. Dr. Mynter stated that he did not know whether this suggestion had been acted upon before, but that three months previously he had operated by this method upon a woman, aged thirty-five, with tubercular osteitis of the carpus. He made a slight change in the original proposition of Professor Studsgaard, however, in splitting the hand between the second and third metacarpal bones, and thus entering the wrist between the trapezoid and os magnum and between the scaphoid and semilunar bones, as by this incision the hand was more evenly divided. The dorsal incision reached up to the radius, and the palmar incision did not extend farther than the base of the thenar of the thumb. The annual volar ligament was, therefore, not severed. His description of the operation, and the ease with which the bones of the carpus could be extirpated with the scissors as well as the surfaces of the radius, ulna, and metacarpal bones by a small saw, made a very lasting

FIG. 1.—Tuberculosis of carpus. Skiagraph made just before operation of excision.

FIG. 2.—Skiagraph showing condition three months after excision of carpus for tuberculosis.

impression upon me, and I decided to employ this method at the first opportunity.

Dr. Mynter tells me in a letter dated October 21, 1899, that he has performed this operation twice since with perfect results; but these cases have not been published. He makes the statement that he splits the palmar surface only to the neighborhood of the superficial arch, and does not sever either arches nor open the palmar bursa.

I have tested this method in the following instance:

The patient is thirty-two years of age and a motor-man by occupation. The family history is good, with the exception that his father died of necrosis of the bones of the face. He had had the ordinary diseases of childhood, and when twelve years of age an abscess in the knee. Two years ago he had rheumatism. Shortly after this he noticed an abscess in his left shoulder, which finally discharged at two places on the arm; both these openings gradually closed, and now, beyond some scars, there is nothing remaining except an almost complete ankylosis of the left shoulder-joint. About two years ago he first began to have pain in the right wrist-joint, but he kept at work for nearly a year, the pain at times being better and at other times worse.

When I first saw him in September, the wrist was swollen and very painful, and had the appearance of typical tubercular arthritis of the wrist-joint. The fingers of the hand were stiff from inflammatory adhesions. He was admitted to the wards in the Orthopædic Hospital, September 20, 1899, and discharged October 21, 1899.

After placing him under the influence of ether and with the hand elevated, an Esmarch bandage was passed around the limb above the elbow, which effectively controlled the circulation. I made an incision upon the dorsum of the hand, extending from the radius downward between the second and third fingers, and split the hand and wrist, but exercised the greatest care not to carry my incision to the deeper tissues of the palm of the hand, nor to incise the sheath of the flexor tendons nor of the palm fascia. Neither of the palmar arches were cut, as I wished, if possible, not to make the palmar incision, and thus destroy the strength of the hand itself. I was astonished to see the facility

with which the wrist-joint could be exposed, and also to see that no tendons whatever were divided by this incision, except one tendon attached to the carpus itself. I was enabled to clean out all of the bones of the wrist, cut away the end of the ulna and radius with a saw, as well as the proximal ends of the metacarpal bones, and with scissors I was able to cut away a large amount of gelatinoid and tubercular tissue from the sheath of the tendons and intermuscular spaces. There was no need, whatever, for splitting the hand farther than this, and the operation was done

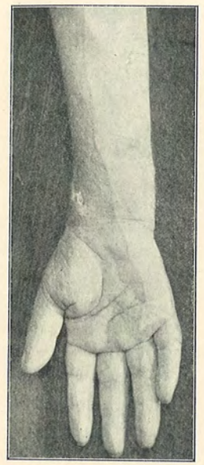

FIG. 3.—Photograph of anterior surface of wrist three months after excision of carpus for tuberculosis.

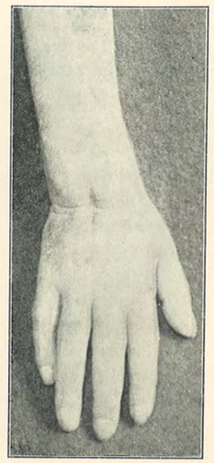

FIG. 4.—Photograph of posterior surface of wrist three months after excision of carpus for tuberculosis.

with as great ease and in as full view as an excision of the knee-joint.

The wound in the skin brought together with silkworm sutures, the tissues having first been brought together with cat-gut, and the dead space between the bones of the wrist and of the hand was packed with iodoform gauze. This was removed in three days, and a small amount of packing kept up at intervals until the wound entirely healed, which was in the course of about

three weeks. The hand, of course, was kept upon a splint. I regret very much at the time of operation I did not break up all of the adhesions in the fingers, as, since that time, we have had a great deal of trouble in overcoming this stiffness in the tendons and in the finger-joints themselves. I had a skiagraph taken of the hand before operation, as well as a skiagraph of the hand since the wound has been entirely healed. The result is most excellent. I do not think, without some such incision, it would have been possible to have gotten rid of the whole of the tuberculous bone, certainly neither Lister's nor any of the older operations would have accomplished the desired end so readily.

While he was in the hospital he complained of a great deal of cough, which was relieved by creosote, as well as of a painful swelling just to the left of the sternum over the third rib. After he left the hospital, this pain and discomfort continued and the swelling increased. He was again admitted to the hospital, ether given, a good-sized cold abscess opened, and a sinus found which extended out towards the left shoulder; this was thoroughly curetted and packed, and this wound is now about well. When he was under ether for this operation, opportunity was taken to break up the adhesions in his fingers, and, although they are still very stiff, considerable progress has been made.

The accompanying skiagraphs and photographs were taken by Dr. D. F. Weeks, the resident surgeon.

DISCUSSION.

DR. H. AUGUSTUS WILSON remarked that the hand was still bandaged, and that immobilization was still maintained. He suggested that increased freedom of movement might increase the flexibility of the fingers and develop the muscles, thereby gaining usefulness of the hand. He said that this case had recalled to his mind a case of an elbow-joint, that was the most flail-like joint that he had ever seen, in which the muscles were educated to such coördination as to bring the arm into almost perfect use. This case of Dr. Taylor's is the most perfect excision of the wrist that he had ever seen; but there is a flail-like disability which might be overcome in the same way that the usefulness of the elbow referred to was re-established; although there are many obstacles in this case, for, besides the loss of function of

the wrist, there is an absence of animus, so essential to the successful accomplishment of the desired end.

Dr. Richard H. Harte said that the wrist is the most unsatisfactory joint in the body to excise. In the first place, the old methods of attacking the joint were always unsatisfactory, owing to the impossibility of getting at the joint without sacrificing the tendons of the muscles. The method practised by Dr. Taylor allows one to attack the joint by simply throwing the tendons to one side, so that one can practically then remove all the bones with the scalpel, forceps, or scissors. By the old method everything had to be removed piecemeal with forceps. The results in these cases, to his mind, were always very unsatisfactory. The cases, after they had had bones removed, dragged along for a long time, and it was a question if it was not always better to amputate the hand in the beginning rather than waste the time dragging along with the hopes of getting some results from a resection. One reason, he thought, why there is still so much impairment of function in this particular case is, that, having removed both rows of the carpus, the amount of fibrous tissue intervening between the bones of the forearm and the metacarpus is so great that it contracts very slowly. It is not like the removing of the same amount of bone in the forearm. There the contraction is very rapid, and the two ends of the bone are brought into relation at once, and there is practically no impairment of function of the muscle. But in this wrist there is nothing but tendinous tissue, and contraction is very slow. It is a flail-joint, and it will be some time before the patient will have the use of his hands as he had them before. Advantage might follow the use of some mechanical appliance which will act as a support between the lower end of the radius and the end of the metacarpal bone, and will increase the functions of the fingers very materially.

Dr. W. J. Taylor replied that repeated efforts had been made to do without some form of support. The man has also a perfectly ankylosed shoulder-joint on the left side; therefore, he is very much more helpless than a man would be who is able to use that arm. He is very much handicapped, inasmuch as he cannot get his right hand over to his left, and he begins by taking his right over to his left to enable him to do anything. Whenever all forms of support are removed, he is quite helpless with the two disabled limbs. He is able to get better motion in the

fingers if there is some form of support. He is getting daily massage at the Orthopædic Hospital; and he is therefore getting a great deal of exercise to the arm, wrist, and fingers. The amount of stiffness in the hand is much less to-day than it was before any operation was done. No very forcible methods to overcoming this stiffness were made at the time of operation. The second time he was etherized the hand was limbered up fairly well; but he is a man who does not bear pain very well; and he has so much the matter with him in addition,—a large abscess in his chest and tuberculosis of the lung, with almost constant pain and cough,—it has been impracticable to do more.