



FIG. 1.—Tuberculosis of the carpus.

TRANSACTIONS OF THE PHILADELPHIA  
ACADEMY OF SURGERY.

*Stated Meeting, March 5, 1900.*

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

TUBERCULOSIS OF THE CARPUS—EXCISION.

DR. ROBERT G. LE CONTE presented a man, twenty-two years of age, who, after a sprain of the wrist sustained six years ago, developed tubercular disease of the carpus. For two years a discharging sinus had been present. A radiograph (Fig. 1) shows the disease to have involved not only the carpus, but the adjacent portions of the radius and ulna and of the fourth and fifth metacarpal bones.

The reporter said that in 1891 Professor Stutgart, of Copenhagen, exhibited a resection of the tarsus, in which he had split the foot between the metatarsal bones, in order to thoroughly expose the tarsal bones. At the same time he suggested that the wrist-joint might be well exposed by splitting the hand completely between the metacarpal bones. This suggestion was taken up by Mynter in 1894. Stutgart advised the complete splitting of the palmar and dorsal surfaces of the hand, cutting between the metacarpal bones down to the carpus. Mynter modified this by splitting the palmar surface only to the metacarpophalangeal joint, and then splitting the whole of the dorsal surface down to the radius. He advocated going between the second and third metacarpal bones.

Dr. William J. Taylor, in doing the operation this fall, still further modified it by limiting the incision to the dorsum of the hand, and opening between the third and fourth metacarpal bones. The incision extended a little beyond the metacarpophalangeal articulation down to the radius. Dr. Le Conte followed Dr.

Taylor in doing this excision. After the dorsal incision on the hand is made, the dorsal and palmar ligaments holding the third and fourth metacarpal bones together are divided and the two bones forcibly separated from each other. With a knife the carpus is now disarticulated from the metacarpus, and by pulling the hand down, the carpus is forcibly dislocated backward. The palmar surface of the carpus is then freed from the soft parts by dissection until healthy bone is encountered in the radius and ulna. After reaching the limit of the disease, the radius and ulna are divided with a saw or forceps. This removes the whole carpus and the radio-ulnar articulation in one piece. If the disease has extended to the metacarpal bones, they are individually resected. All tubercular material is now dissected away from the tendon sheaths and the adjacent soft parts. The incision is then closed and the resulting cavity loosely packed with iodoform gauze. The advantages of this operation over the older methods of excision seem to be these: that one can treat the carpus as one bone instead of picking it out piecemeal, that there is little danger of cutting tendons except those attached to the carpus, and that the exposure of the parts is so free that all tubercular material is easily dissected away from the surrounding soft parts, leaving a clean wound which heals promptly.

DR. W. J. TAYLOR remarked that the advantage of the method of operation illustrated in Dr. Le Conte's case is that it gives greater facility, greater ability to get at and remove all the diseased tissue. By this incision one can absolutely turn out the bones from the joint; one can expose every nook and cranny and can cut out with the scissors every particle of tubercular disease. Then, too, a saw can be used to cut the ends of the radius and ulna, and exposure of the joint and of all the surfaces is made quite as well as in the ordinary excision of the knee. The patient he showed to the Academy in January, upon whom he had operated, has developed a general tuberculosis now. His other wrist is involved, his shoulder is involved, he has had a large tubercular abscess in his chest, and his lungs are very much involved in the disease. Although this has not been a favorable case for the ultimate good results, yet the very large dead space between the ends of the shortened metacarpal bones and the radius and ulna has steadily diminished. When seen a few weeks ago, he had very much less motion in the wrist than when he was here, show-

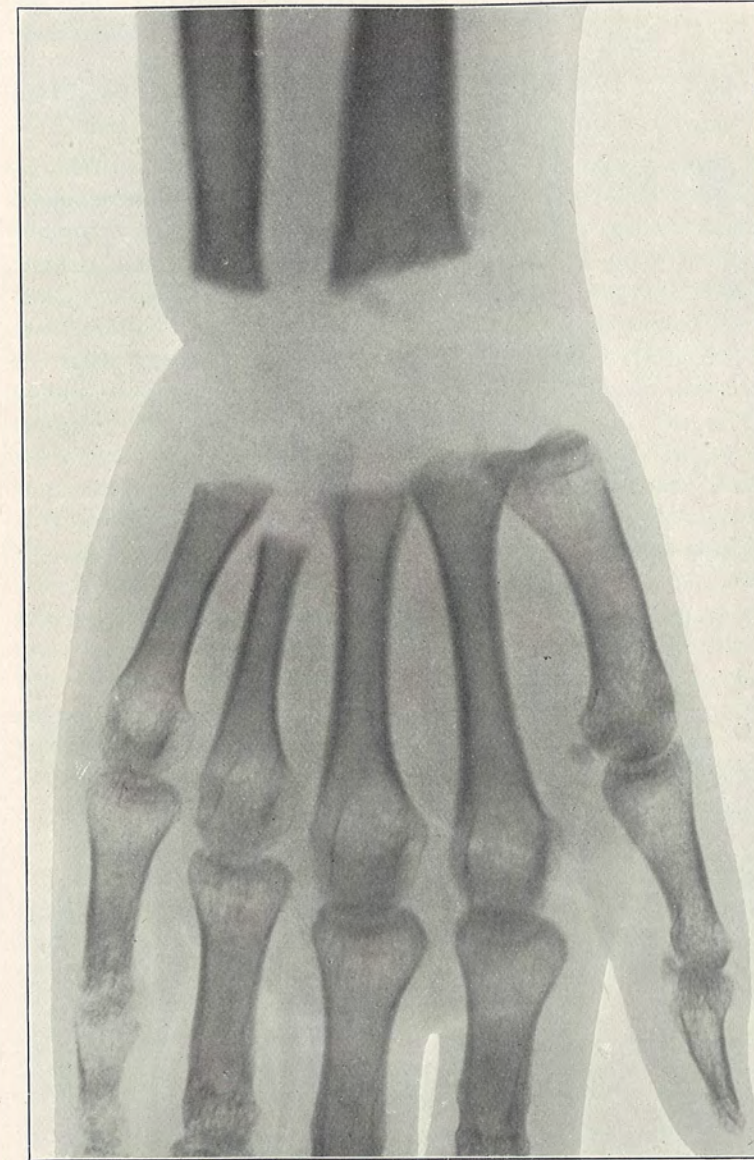


FIG. 2.—Tuberculosis of the carpus.

ing that the fibrous tissue was filling up and the dead space was contracting.

#### CARCINOMATOUS DEGENERATION OF UTERINE MYOMA.

DR. ROBERT G. LE CONTE presented a specimen of large intraligamentous fibromyoma of the uterus with endometrial carcinoma of the fundus. The specimen had been removed from a woman, aged thirty-six years, who was admitted to the Pennsylvania Hospital January 20, 1900, well nourished, but very anæmic from profuse bleeding from the uterus. A blood count showed red cells, 2,000,000; white, 7400; marked poikilocytosis, hæmoglobin, 18 per cent. A large, smooth, firm, movable tumor extended from the pelvis to two inches above the umbilicus. Vaginal examination revealed a normal cervix with a virgin os, which was continuous with the tumor above. The patient was placed at absolute rest, with the most nourishing of diet, ferruginous pills, and 1/100 of a grain of atropia sulphate three times a day. At the end of a week the bleeding had practically ceased. February 28, hæmoglobin had reached 57 per cent.; March 2, the tumor was removed. It was almost entirely covered by a greatly hypertrophied broad ligament. It filled the whole of the pelvis, making it impossible to reach the vessels until the broad ligament had been completely split across. The uterus was amputated at the internal os, the stump closed, and the broad ligaments whipped together with catgut. Dr. Cattell, pathologist to the hospital, reports as follows:

The specimen can best be described as composed of two parts, the one a large myofibroma, the other the uterus, with cancerous degeneration of the fundus extending down within three-quarters of an inch of the cut portion. The weight of the mass is four pounds fourteen ounces, the length eight inches, and the width seven and one-half inches. Microscopically, the cancer is of the glandular variety, the acini are long and tortuous, and in places well filled with epithelial cells arranged in layers.

At the time of operation there was nothing to suggest cancer, or a complete hysterectomy would have been done. The point of interest now is whether the stump of the cervix should be removed, or whether an amputation three-quarters of an inch away from diseased endometrium is a sufficient safeguard to the

patient. Of all the situations in the body, carcinoma of the fundus uteri is by far the most favorable, and operation has been followed by the largest proportion of cures. Dr. C. B. Penrose recently told the reporter that he had three times amputated the uterus at the internal os for causes other than cancer, and that an examination of the specimens later revealed carcinoma of the fundal endometrium. In each case he had gone beyond the disease for half or three-quarters of an inch, and none of the patients would consent to a second operation. The last patient was operated on four years ago, and all are living and well, and free from a return of the disease.

DR. BEYEA said that he remembered very well the three cases operated upon by Dr. Penrose, referred to by Dr. Le Conte, having himself made the microscopical studies of the growths. In all three the malignant disease was in a very early stage of development; in fact, there was some question of doubt as to the actual presence of such a change. The endometrium showed the microscopical changes characteristic of the diffuse hyperplastic or fungoid endometritis described by Olshausen, but in the deeper portion of the endometrium the glandular proliferation was so great that it seemed to be breaking through into the stroma tissue. They were cases of hyperplastic endometritis in which there was a strong suspicion of beginning malignant adenomatous change. There was no positive diagnosis of malignant adenoma. They were not adenocarcinoma or medullary carcinoma. For these reasons they can scarcely be of value in considering the danger of leaving the cervix behind when there is carcinoma of the body of the uterus. Carcinomas of the body of the uterus, however, rarely infiltrate into the cervical tissue, but, beginning in the corporeal endometrium, infiltrate and destroy the muscle wall of the body, and finally break through the peritoneum. In one instance he had observed the muscle tissue of the body quite completely destroyed by the carcinomatous disease, which formed nodules beneath the peritoneum and distorted the shape of the uterus. Even here the cervical tissue was normal. The patient has now been free from recurrence five years. He would say from his experience and microscopical studies of these cases that it is quite improbable that there will be a return in Dr. Le Conte's case. The association of carcinoma with myofibroma of the uterus has not

infrequently been reported. He had observed three such cases. Last year he had under his care a woman who had a carcinoma of the cervix with a large multinodular fibroid of the fundus. The case was an inoperable one; the infiltration extending into the broad ligaments. Another case was that of a woman operated upon some four or five years ago. There was an interstitial fibroid nodule the size of a baseball at the fundus, and an advanced malignant adenomatous disease arising in the endometrium and destroying the muscle wall of the uterus. Here, too, the cervix was normal. It was the only typical case he had seen of that form of malignant disease which Ziegler described as adenoma destruens. The gland spaces were irregular, one breaking through into another, and they were lined with a single layer of cylindrical epithelium. Nowhere did the cells fill up a gland space or present the change characteristic of adenocarcinoma. He believed this to be an extremely rare form of carcinoma of the uterus.