

CARCINOMA OF THE RIGHT FALLOPIAN TUBE
READILY PALPABLE THROUGH
THE ABDOMEN.

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Cancer forms a very small percentage of the pathological [20] conditions of the Fallopian tube. As pointed out by Hurdon,¹ carcinoma was noted only three times in the tube, as compared with some four hundred cases of cancer of the uterus that came under our observation in the Johns Hopkins Hospital. Among the more important American articles on this subject are those of LeCount² and Hurdon.³ In the Johns Hopkins Bulletin of 1905, Vol. XVI, p. 399, I reported a case of adenocarcinoma of the tube in which as a result of extensive involvement of the pelvic peritoneum and of the surrounding tissues I found it necessary to remove not only the entire uterus with the adnexa but also several inches of the sigmoid flexure and about one-third of the pelvic peritoneum.

Alban Doran,⁴ of London, has given a complete survey of the literature and collected in all sixty-two cases. A further admirable monograph on the same subject by the same author⁵ appeared a few months ago. In this the number of cases of carcinoma of the tube had been increased to one hundred.

¹ Elizabeth Hurdon, Kelly, H. A., and Noble, C. P. *Gynecology and Abdominal Surgery*, Phila., 1907-08, I, 175.

² LeCount. *Johns Hopkins Hosp. Bull.*, 1901, Vol. XII, p. 55.

³ Elizabeth Hurdon. *Johns Hopkins Hosp. Bull.*, 1901, Vol. XII, p. 315.

⁴ Alban Doran. *J. Obst. & Gynæc. Brit. Emp., Lond.*, 1904, VI, 285.

⁵ Alban Doran. *J. Obst. & Gynæc. Brit. Emp., Lond.*, 1910, XVII, 1.

[20] After such thorough presentations of the subjects as have been furnished by these authorities a further survey of the literature would be simply a repetition and I shall merely report a case which came under my observation in the laboratory. Its chief interest lies in the large size of the growth. When I first saw the hardened specimen before learning the clinical history, I considered it to be a very large hydrosalpinx or pyosalpinx. On section, however, its true character was readily discernible.

Adeno-carcinoma of the right Fallopian Tube, extension to left Fallopian Tube; very small uterus.

San. No. 2453.—Mrs. M. H., aged 46. Admitted to Dr. Kelly's private sanitarium on May 14, 1907. The patient entered complaining of a mass and great pain in the lower part of the abdomen. The family and past history were negative.

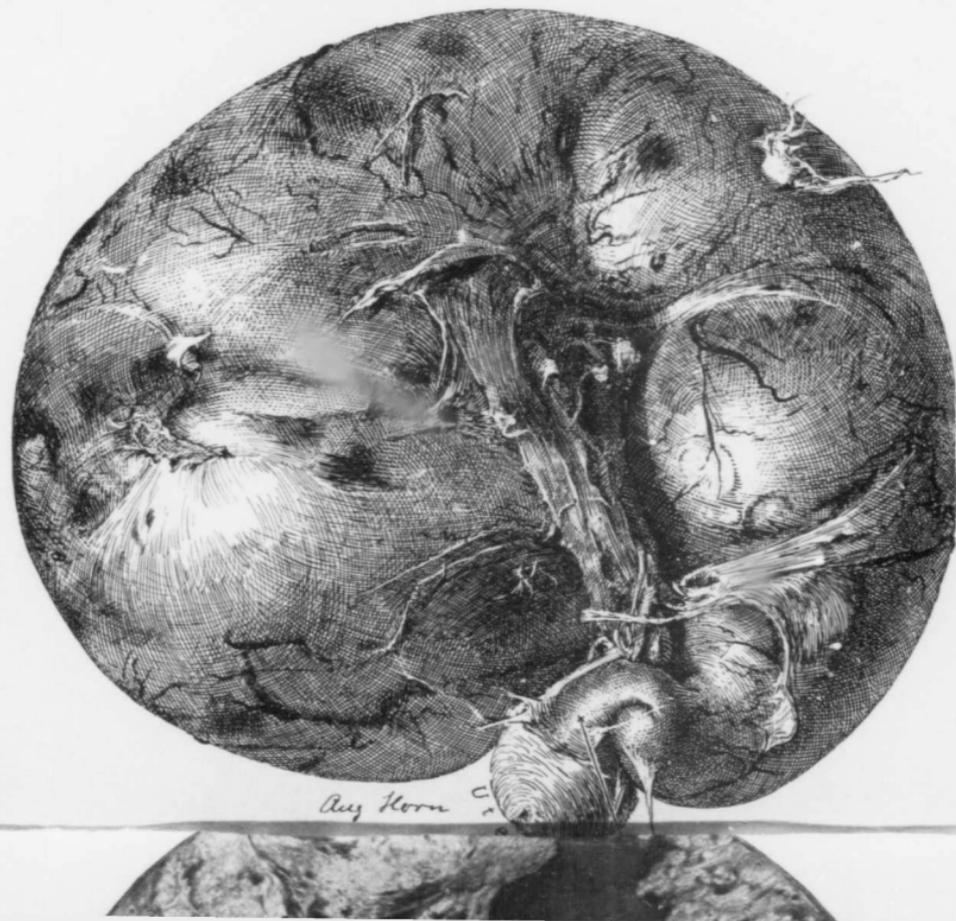
The menses began at 14, were regular, moderate in amount, somewhat painful and usually lasted four days. For the last two or three months the periods have been irregular but profuse. She had one miscarriage when 18. Recently there has been a profuse leucorrhœal discharge which, for the past year, has been associated with some odor and with blood.

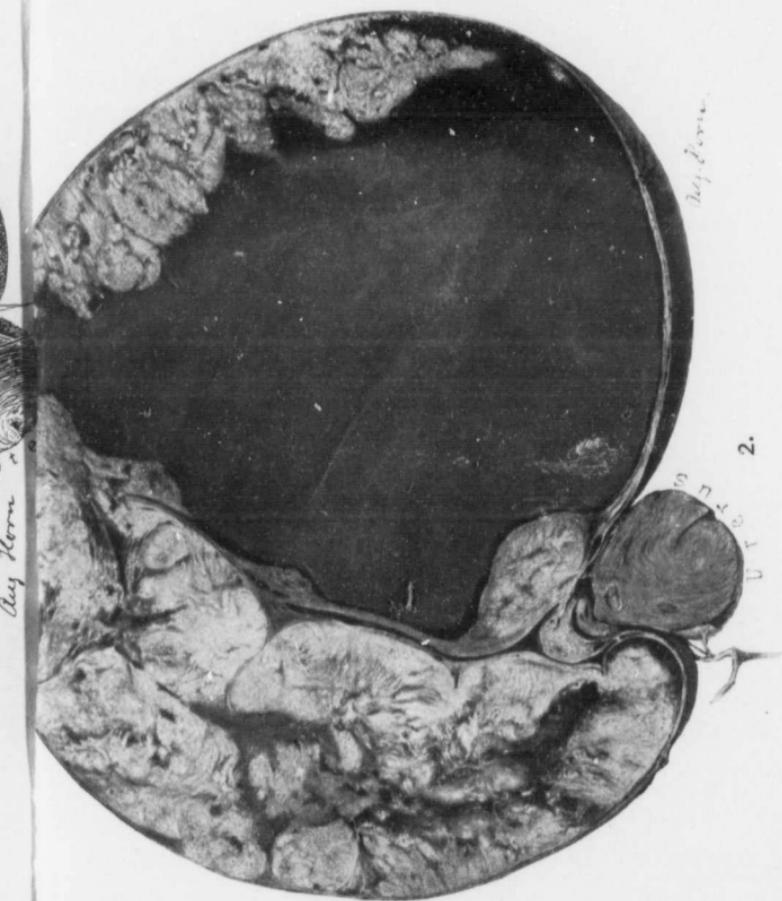
Present illness.—Two years ago the patient first had what she called an attack of appendicitis. The pain was located in the right iliac fossa and was severe and cramp-like in character. It has persisted in this region and for the last year has also been present in the left side. The pain radiates into the leg and for the last four or five months both legs have been swollen.

Operation.—The uterus was removed by bi-section; a small piece of intestine was also removed on account of a little sub-peritoneal cyst which was supposed to be secondary to the tubal growth. There was no glandular involvement and no evidence of any peritoneal implantation.

Path. No. 11536. The specimen consists of a small uterus, of a greatly enlarged right Fallopian tube and of an enlarged left Fallopian tube.

The body of the uterus is 4 cm. long and about 4 cm. broad. It is markedly atrophied. The right tube at the uterus is about 7 mm. in diameter, but after passing outward 1 cm. it curves on itself, becomes markedly convoluted and 5 cm. from the uterus is 5 cm. in diameter. It continues to increase in size until at its outer end it is 10 cm. in diameter. Roughly it forms a sausage-like tumor 14 cm. long, 12 cm. broad, and about 10 cm. in thickness. Anteriorly it is covered with adhesions. Posteriorly it is perfectly smooth and springing from its surface is a sub-





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peritoneal cyst 1.5 cm. in diameter. Large congeries of blood vessels are seen ramifying beneath the peritoneum. [20]

On section it is seen that the great increase in size is due in a large measure to a new growth. This has extended into the lumen of the tube, but at no point does it appear to have reached the outer surface. Where the tube is 5 cm. in diameter the growth completely fills the lumen. It is composed of a granular-looking new growth which presents a somewhat arborescent appearance. The growth apparently springs from all parts of the wall of the tube. Near the fimbriated extremity, where the tube is 10 cm. in diameter, for over fully half of its extent the walls are covered with a new growth. This in places reaches 2 cm. in thickness. At other points the tube seems to be free from the growth. The entire central portion of the tube has been filled with fluid that has undergone coagulation in the hardening fluid. In the fluid next the growth here and there are large blood clots. The gross picture leaves little doubt that we are dealing with a malignant growth. If it be malignant the reason why it has not extended outside seems evident, because the point of least resistance would be toward the center of the tube.

The left tube, near the uterus, is 5 mm. in diameter, but on passing outward a short distance it is dilated to 4 or 5 cm. It likewise on section is found to be the seat of a similar growth. The tube is covered with adhesions.

Histological Examination.—Sections from the growth of the right tube show in some areas little tree-like or teat-like projections extending into the cavity. They remind one very much of the small folds noted where a hydrosalpinx exists. At other points the epithelium has proliferated forming gland-like areas. In more advanced portions over wide areas papillary outgrowths are seen. These present a distinct arborescent appearance and the projections are covered with one or several layers of very high, exceedingly regular cylindrical epithelium. Over large areas there is not the slightest evidence of breaking down. In still other portions of the growth one sees nuclei two or three times the usual size. These stain somewhat deeply. In other portions cross and longitudinal sections of finger-like processes with large blood vessels in their interior are seen. Here and there the epithelium proliferated until solid masses of glands have been formed. Masses of epithelium without evidence of gland formation are also noted. In only a few places is there evidence of breaking down.

The growth is, without doubt, a carcinoma, but is characterized by a marked tendency toward gland formation and papillary outgrowths, and by its stability instead of its tendency toward breaking down. One might, with some propriety, claim that it re-

[21] sembles, to a marked degree, a very cellular and branching papilloma.

It is interesting to note that the other tube presents a similar appearance. One tube may have picked the carcinoma up from the other. The tube walls themselves are not over 1 mm. in thickness. We did not receive the ovaries or the small nodule from the bowel for examination.

We find no record of any other carcinomatous tube that has reached such large proportions.

Post-Operative History.—Sept. 30, 1910. Dr. Curtis F. Burnam kindly made inquiry concerning the patient and finds that there is at present a marked recurrence of the growth, there being a large palpable abdominal mass. The patient, however, is able to do her work most of the time and her general health has been but little affected.

The growth has evidently been a rather slow one as it is nearly three years and a half since operation.

DESCRIPTION OF FIGURES.

FIG. 1.—Primary Carcinoma of the Fallopian Tube. (Natural size.)

The small uterus has been bisected and one-half is seen in the lower part of the picture. The tube at the cornu is small, but after passing outward a short distance rapidly increases in size. Its outer end is so much distended that it might readily be mistaken for an ovarian cyst. The surface of the tube is covered by numerous adhesions and its vessels are large and tortuous. The interior of the tube is shown in Fig. 2.

FIG. 2.—Primary Carcinoma of the Fallopian Tube. (Natural size.)

For the general contour see Fig. 1. In the lower part of the picture is a cross section of half of a bisected uterus. The great increase in size of the tube is in a large measure due to a friable, stringy growth which almost completely fills the lumen. The great distension of the outer end of the tube has been caused by an accumulation of serous fluid which has coagulated in the hardening fluid. This coagulum is seen retracting from the tube wall and could readily be lifted out of the tube in one piece. It will be noted that where the tube is so much dilated its walls over a considerable area are totally devoid of new growth.