Papillo-cystoma of the ovary / by Thos. S. Cullen.

[From *The Johns Hopkins Hospital Bulletin*, No. 43, November, 1894.]

25

PAPILLO-CYSTOMA OF THE OVARY.

By T. S. Cullen, M. B., *Assistant in Gynecology.*

Although papilloma of the ovary is not particularly rare, this case is published on account of the involvement of both ovaries and because the places of origin are considered as being of interest. Moreover, as will be seen, the specimen was quite perfect.

Mrs. K., admitted to the service of Dr. Kelly, 2, 14, 1894. Æt. 41, married.

The patient complained of abdominal enlargement accompanied by loss of flesh and strength. She has been married 22 years and had one normal labor 20 years ago. Her only previous illness was typhoid fever, 10 years ago.

Present Illness.—In February, 1893, she began to feel languid, and was with difficulty able to continue her housework. In July she noticed a slight burning sensation in the right hypogastrium, not affected by exercise nor influenced by menstruation. Her body weight began to decrease. About September the abdomen commenced to enlarge and continued to increase in size. The weakness and emaciation also were progressive. In November she vomited a greenish fluid. Defecation was accompanied by some pain in the pelvis. Since that time there has been little change.

Menstruation commenced in her eleventh year, was regular, moderate in amount and somewhat painful. In November, *the menses suddenly ceased* and have not recurred.

Physical Examination.—The patient is fairly well nourished. Her mucous membranes are somewhat anæmic. Heart and lungs apparently normal. Liver dulness not increased. The abdomen is enormously and symmetrically distended. The greatest prominence is below the umbilicus. The lineæ albicantes in the lower abdominal zone are very prominent. The superficial veins are distended.

Palpation.—Some superficial œdema above the symphysis pubis. No masses to be felt.

Percussion.—No tympanitic note can be elicited below the umbilicus. A distinct wave of fluctuation is felt. Above the umbilicus the tympany extends 16 cm. to the right and 12 cm. to the left of the median line.

Abdominal Measurements.—

Umbilicus to ensiform cartilage	21 cm.
" " pubes	27 "
" " right anterior superior spine	27 "
" " left anterior superior spine	27 "

Greatest circumference 145 cm., at the umbilicus.

Vaginal Examination.—The outlet is greatly relaxed. The cervix is in the axis of the vagina; uterus retroflexed, apparently fixed in the pelvis. No tumor felt.

Per rectum.—In Douglas's pouch a mass of indefinite size can be detected, conveying the impression of small papillomatous masses.

2, 17, 1894. Operation by Dr. Kelly, double cystectomy. On opening the abdomen 17 litres of fluid were found free in the cavity. On both sides large cysts were seen, occupying Douglas's cul-de-sac; by these the uterus was pushed forward. The left side was elevated, tied off and removed without difficulty. The right side was enucleated after being liberated from dense adhesions to the broad ligament and to the posterior surface of the uterus. Adhesions between the bladder and broad ligament were cut, and about eight small papillary nodules were excised from the pelvic floor. It was impossible, however, to remove all of them on account of their intimate relation to the bowel. The peritoneum was thoroughly sponged out and the wound closed. Silk sutures were used throughout. During the third week the temperature rose to 101.8° and fluctuated between that and 99.5° for three days, otherwise the patient had an uninterrupted recovery, and was discharged on March 20, feeling well.

Pathological Report.—*Right side,* the ovary is replaced by a tumor 8.5x8x7 cm. This is irregular in contour, being made up of several cysts, varying in size. These cysts are bluish-white and translucent. The most dependent part of the tumor

is yellowish in color. Springing from the uterine side of the tumor is a pinkish cauliflower-like mass which has a somewhat narrowed base. The interior of the tumor is occupied by five cysts; these are smooth-walled, but have, developed upon their inner surfaces, small papillary-like masses. The fluid in the large cyst is somewhat tenacious, in the smaller ones limpid. The tube is 4 cm. long, 5 mm. in diameter. Its fimbriated end is free. Parovarium is normal.

Microscopically.—The cyst walls are composed of connective tissue moderately rich in cells. Several corpora fibrosa are scattered throughout the wall. The outer surface is lined by flat epithelium. The papillary masses springing from the outer surface are composed of finger-like projections of connective tissue which become branched toward their termination. The connective tissue near its attachment to the cyst wall is moderately rich in cells, but as it passes outward the cells diminish in number and the stroma presents a hyaline appearance. The surface epithelium as it approaches the papillary masses becomes cuboidal, and where covering the masses is cylindrical. The inner surface of the cyst wall is lined by cylindrical epithelium. The papillary masses springing from the interior, Fig. 3, present the same appearance as those on the outer surface, but appear to have no connection with them.

Left Side.—The ovary is converted into a similar tumor of the same size; here, however, the papillary masses tended to spring from the depressions between the cysts. Both tubes normal.

Source of Origin.—The outer ones undoubtedly spring from the germinal epithelium. It is the opinion of Professor Welch that those on the inner surface of the cysts originated in the cells of the Graafian follicles; the cysts forming first, and the papillary masses developing secondarily. This mode of origin is, we consider, indicated by the small number of cysts present. The small masses from the tissue surrounding the rectum presented a typical papillary appearance.

Professor Abel made a chemical examination of the fluid from the abdominal cavity. The fluid was yellowish in color and presented a greenish tinge, was alkaline in reaction and had a specific gravity of 1020. It contained serum albumen, serum globulin, a trace of sugar and fibrin.

Although the prognosis in this case was considered unfavorable owing to the incomplete operation, the patient has, during the six months following the operation, gained 49 pounds.

The sudden cessation of menstruation is of especial interest as associated with the diseased condition of the ovaries.

Description of Plate.

Fig. 1.—Natural size of tumor from right side, hardened in Müller's fluid and then cut open. Springing from its outer surface are papillary masses. Internally it is composed of one large and several smaller cysts. Projecting from the inner surface of these are papillary masses. The large cyst, *c*, contains a tenacious fluid which was coagulated by the Müller's fluid. *a* is a cross section of the normal Fallopian tube.

Fig. 2 is the other half of Fig. 1. The coagulated fluid has been washed out of the large cyst cavity, enabling one to see the papillary masses more distinctly.

Fig. 3 is a section of a small nodule taken from the inner surface of the cyst in Fig. 1 at the point represented by *b*. (Winckel Ocul. I, Obj. 3.) *d* is the cyst wall, which is composed of wavy fibrous tissue poor in blood supply. The inner surface of the cyst is covered by one layer of cylindrical epithelium. The papillary mass presents a tree-like appearance. It also is composed of connective tissue, which becomes less dense the farther it is away from the cyst wall. All the folds and convolutions of this papillary mass are covered by one layer of cylindrical epithelium. In some places the cells have been cut slantingly and then look somewhat like squamous epithelium. The orange-colored areas are blood-vessels.

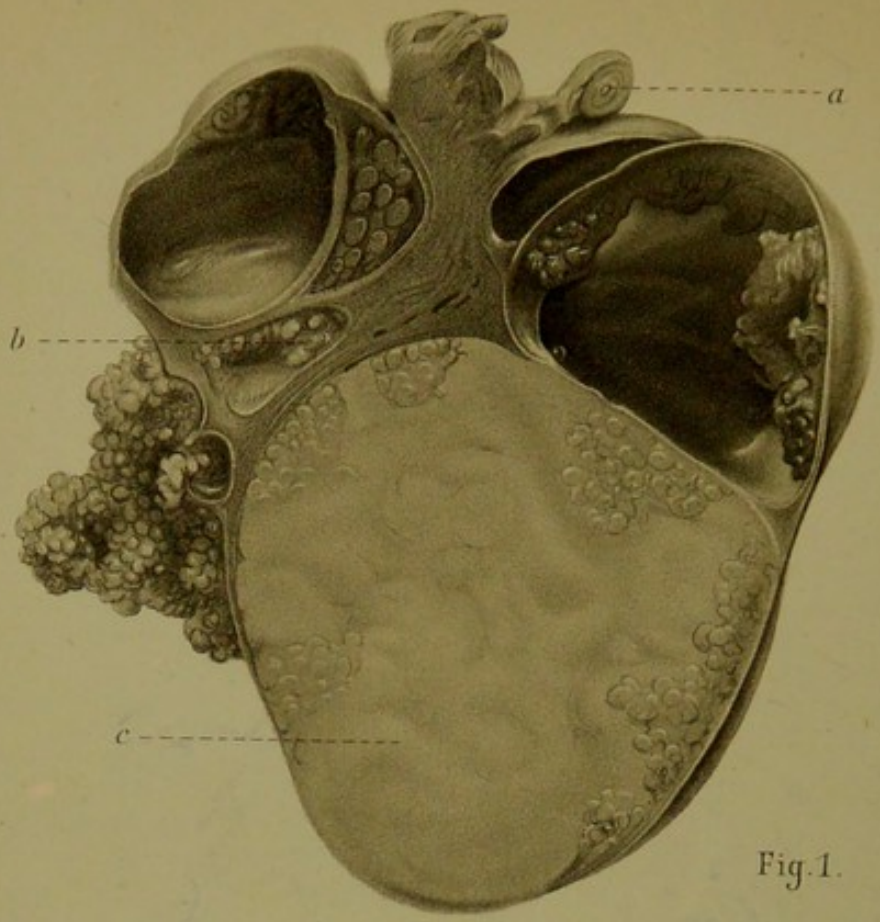

Fig. 1.

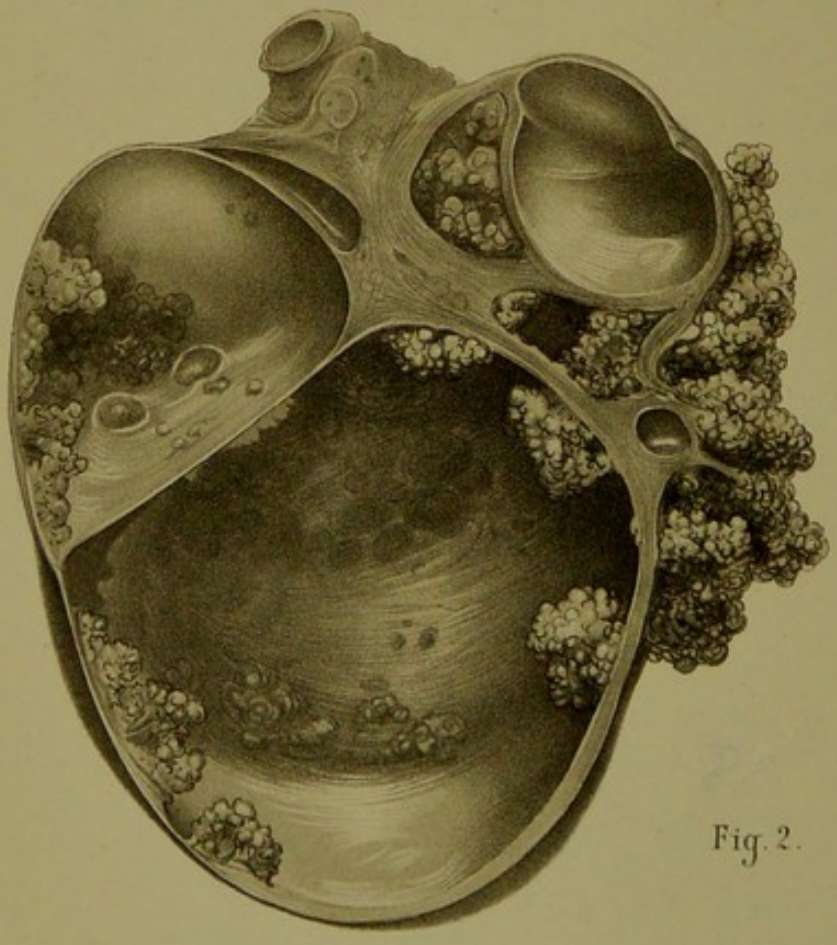

Fig. 2.

M. Brödel, del.

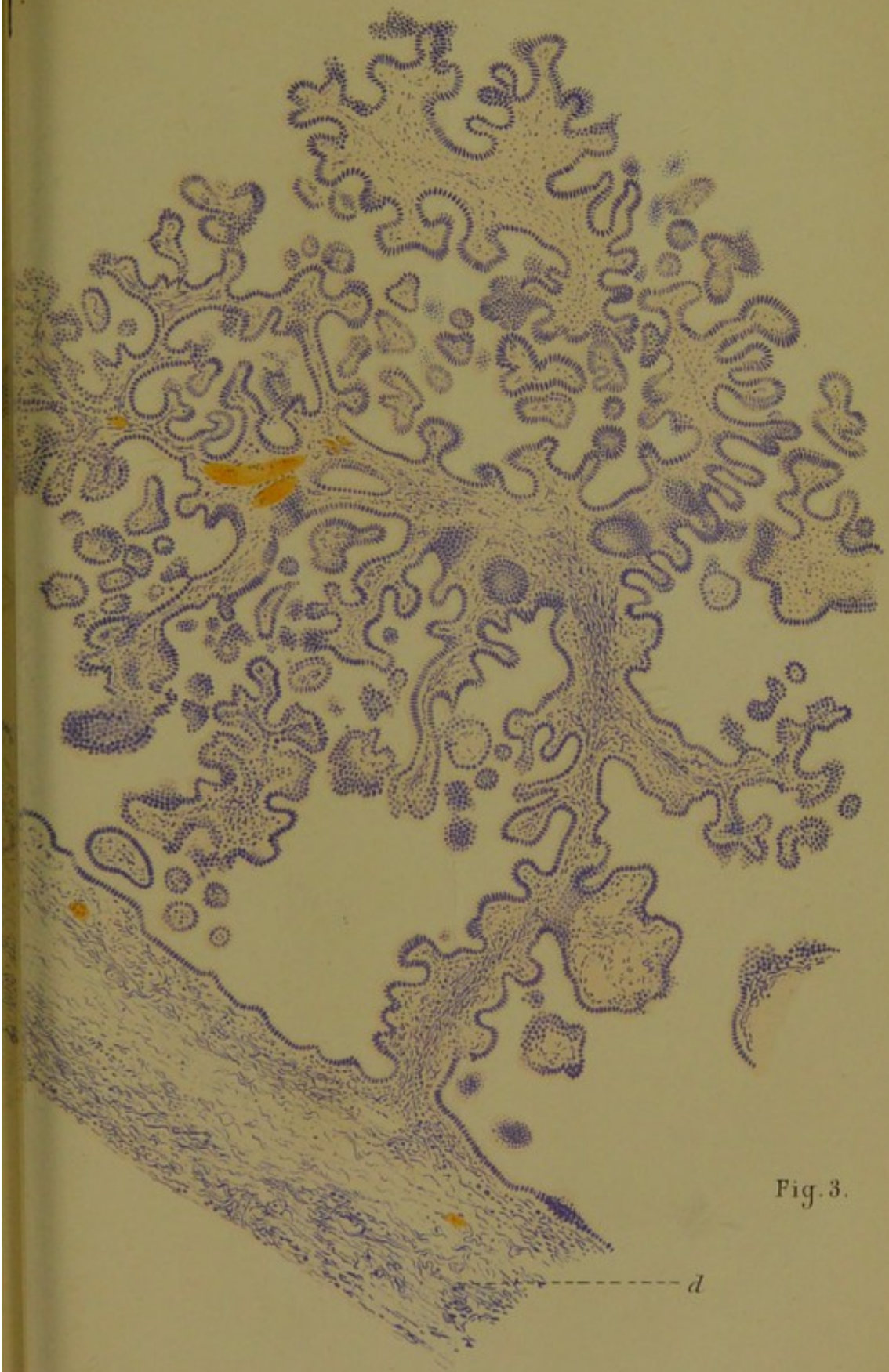

Fig. 3.

Lith. Anst. v. E. A. Funke, Leipzig.