ART. XIV.—*Large Multilocular Ovarian Cyst of long standing; Two Tappings; Ovariectomy; Veratrum Viride and Quinia in After-Treatment; Recovery.* By W. HUTSON FORD, M.D., (late) of New Orleans.

MRS. E. D., of Attala County, Mississippi, an active cheerful woman, æt. 44; married in 1848, mother of eight children. Had a severe attack of measles, with consequent broncho-pneumonia, in March, 1849. Has suffered from cough and bronchorrhœa ever since. During last ten or twelve years, has had some uterine prolapse with leucorrhœa. Always menstruated regularly until within a few months back. General health hitherto good, the pectoral troubles excepted. She first noticed a tumour in the abdomen, in the summer of 1867, seven years ago. This gradually increased in size, though producing very little effect upon her health, and scarcely interfering with the usual avocations of a farmer's wife. Has not had any attacks of partial peritonitis, so common in these cases, nor any in the tumour itself, nor has she suffered from gastric disturbance or intestinal derangement. Within a year past, has been troubled with exacerbations of the cough, and increasing dyspnœa, attributable to pulmonary œdema and hydrothorax. Was tapped in linea alba in August, 1874; half gallon of dark, grumous, chocolate-coloured fluid obtained. There was no subsequent peritoneal inflammation.

I first saw her Sept. 20, 1874. Her girth was very great, and the surface of the abdomen traversed everywhere by large and tortuous venous trunks, testifying to the obstruction of the deep return currents. Nevertheless there was no œdema anywhere, not even about the malleoli, probably owing to the unusually slow growth of the tumour. When she was placed in the recumbent posture, the walls of the abdomen could be slipped about over the tumour freely—with the production of a very distinct friction-sound, similar to that which might be produced by rubbing a wet surface of glass with a piece of thin non-vulcanized caoutchouc. Deep fluctuation was well marked in several parts of the abdomen. Palpation determined the existence of several hard bosselated protuberances in different places, notably in the hypogastric and iliac regions. On striking the abdomen in the left iliac fossa with four fingers placed together, the blow being slight and quick and directed upwards, a wave of moving fluid could be very plainly *seen* to advance upwards to the stomach, and to be thence reflected from the surface of the viscera, or of the diaphragm, downwards again into both iliac regions. In view of these facts I diagnosed a non-adherent multilocular ovarian cyst.

On tapping, two inches to the right of the umbilicus and an inch below it, two gallons and a quart of chocolate-coloured grumous fluid was obtained. This tapping I did in the recumbent posture; it was followed by no inconvenience or accident whatsoever. The fluid gradually accumulating and the dyspnœa reappearing, I performed ovariectomy on the 23d of October, 1874, at 10.30 A. M., after the usual systemic preparation. I had, however, before this, caused her to take considerable doses of quinia and iron with digitalis for some weeks. No morphia, however, or other opiate was given, as has been recommended with a view to accustom the system, and stomach especially, to its use, for some days before the operation. The night before, she took fifteen grains of quinia, and at 6 A. M.

ten grains more. At the operation there were present Drs. G. W. Scarborough, of Kosciusko, Miss. ; S. K. Coleman, of Canton, Miss. ; Richard G. Gantt, Collins, and Mr. Dodson, medical student. Anæsthetization with sulphuric ether took about half an hour ; once, a little chloroform was thrown upon the sponge, whereupon the patient vomited, and continued to do so, though not violently, for a quarter of an hour. Afterwards, however, the vomiting ceased, and she became unconscious ; the pulse remaining very good, and the respiration full and free. Once, also, there was a sudden flushing of the face, which quickly passed off. I attributed all this to the chloroform, as she had experienced similar troubles in the first tapping, in which chloroform had been given. As the patient lay on the operating table, she measured seventeen inches from ensiform cartilage to pubic symphysis ; and forty-one and a half around the abdomen through the umbilicus. The knife was entered two inches below the umbilicus, and a mesial incision made four inches long. The linea alba, being hit upon, was similarly incised. The peritoncum was opened and divided to the extent of the external wound. Thus far there was no hemorrhage, only a very little oozing. About two pints of ascitic fluid escaped on opening the peritoneal cavity, and the tumour presented fairly at the wound. I passed in my hand and found no adhesions save at the sites of the previous punctures made in tapping. The tumour was now tapped with Atlee's large trocar ; about fifteen pints of dark chocolate-coloured fluid escaping. After the partial collapse of the tumour, on attempting to draw it through the wound, I found it impossible to do so, notwithstanding the apparent absence of adhesions. Tapping high up in the incision brought only an insignificant quantity of gelatinous transparent fluid, evidently from a young cyst. I therefore enlarged the wound by successive strokes of the knife from within outwards upon my finger as a director, until the wound was large enough for me to pass in my hand. Introducing my right arm nearly to the elbow, far up into the sub-diaphragmatic space occupied by stomach and spleen, and disengaging the mass which entirely filled this region, I drew downwards gradually into the orifice another full cyst, separated from the one first tapped by a hard mass of adventitious tissue, and entirely out of the reach of the trocar through the primary incision. As this unwieldy mass appeared at the opening in the abdominal walls, it was tapped adroitly by Drs. Coleman and Gantt without the least spilling of its contents into the abdominal cavity. The whole growth was now withdrawn through the wound (which was eleven and a half or twelve inches long), and was found to spring by a pedicle some three inches broad and not more than two inches long and a quarter of an inch thick, from the right broad ligament. The Fallopian tube was incorporated with the neck of the cyst. The pedicle being short, I determined to follow Macleod's method and twist it off. Accordingly an Atlee's improved clamp was applied to the pedicle quite up to the body of the uterus, and the pedicle cut off with the scalpel about an inch and a half beyond the clamp. The stump of the pedicle now left was divided into two parts with a bistoury, *i. e.* split in its middle line, and each half separately twisted off with a small hand vise, while an assistant held the clamp immovable. On removing the clamp afterwards, some little hemorrhage was observed, requiring a carbolized catgut ligature, and a few touches of the brush dipped in Monsell's solution. Presently, however, it became evident that arterial hemorrhage was going on, and searching along the line of the wound now extended along the broad ligament, a nodule of extravasation, as big as a large acorn, was

observed to have been formed in connection with the spermatic artery, which was seen to be bleeding pretty freely, notwithstanding the twisting. This hemorrhagic nodule was enucleated by the fingers, and the artery tied with a fine carbolized catgut ligature cut off close.

After all hemorrhage had apparently ceased, and the fluids contained in the abdomen removed as carefully as possible by the sponge, and dipped out of the right iliac fossa, the patient was gently rolled over on her right side, so as to allow any fluid loitering around the uterus and rectum to gravitate thither, the viscera meanwhile being gently held back by pressure upon the abdominal walls; the incision was then closed. I did not think it necessary to insert a drainage tube, though provided with various modifications of such apparatus, in view of the general absence of adhesions and little consequent danger of continued trickling of blood into the abdominal cavity. The wound was closed by quilled suture. Thirteen deep silver sutures were introduced by a hollow needle (similar to Keith's), and fourteen fine silken carbolized sutures were passed superficially. After some twenty minutes, the patient being still on the operating table, what seemed to be a small knuckle of intestine was observed two inches below the umbilicus, between two of the sutures. This was thrust by the finger downwards into the abdomen, the deep sutures near by tightened, and one or two additional superficial ones introduced. The line of the wound was smeared abundantly with styptic colloid, and a piece of lint smeared with carbolized cerate laid over its whole length. Across this, the line of sutures was fortified as usual by long strips of adhesive strap passing clear over upon the flanks. A wide bandage, well padded in the ileo-lumbar regions with raw cotton, completed the dressing. The patient was then put to bed. The whole time of the operation, including the etherization, was one hour and forty minutes. The tumour proved to be a multilocular cyst of the broad ligament. There was an almost countless number of secondary cysts. None of these had begun to suppurate, or contained any of the viscid, creamy matter so like pus, often found in advanced growths of the kind. The larger cysts contained grumous, chocolate-coloured fluid, such as was obtained by the tapplings; the smaller ones, of the size of a pea up to that of an orange, with walls in some cases no thicker than writing paper, contained only transparent ropy matter. The fluids drawn from the cyst during the operation, in conjunction with the extirpated mass itself, weighed *thirty-eight and a half pounds*. Estimating the ascitic fluid which escaped at a pint and a half, the contents of the abdomen removed were not short of *forty pounds*.

The after-treatment may be briefly described as follows: In order to prevent septic infection, quinia in ten-grain doses was given by enema, morphia being freely given in this way alone. At 7.30 P. M., six hours after the operation, the pulse being at 110, the administration of pills containing two grains of quinia and two drops of Norwood's tincture of veratrum each was begun. This medication by quinia and veratrum conjointly, with occasional doses of morphia and some whiskey at night, was continued for the first ten days.

The cough with which she had been previously troubled for years, was a source of much annoyance to her and no little apprehension to myself; but it gradually became less violent. She was made sick by the veratrum once only; she vomited a little on the sixth day, and had some hiccough. This was, without doubt, partly due to the influence of veratrum, but I am inclined to attribute it in part also to the morphia and quinia. It

yielded readily to sinapisms and a little whiskey and water, ether, and hypodermic of morphia. On the fourth day she had distinct threatenings of septicæmic infection; this was met by enemata of quinia dissolved by Monsell's solution in water.

The wound healed wholly by first intention, excepting for one point of insignificant extent. The bowels did not move until the twelfth day. I did not remove the deep sutures until the eighth day. The following is the record of pulse and temperature:—

1st day, morning, operation; evening, 4 P.M. 88, 9.30 110.
 2d day, morning, pulse 110, tem. 100°; evening, pulse 100, tem. 100°.
 3d day, morning, pulse 74, tem. 100°; evening, pulse 82, tem. 100.5°.
 4th day, morning, pulse 65, tem. 100.5°; evening, pulse 82, tem. 100.3°.
 5th day, morning, pulse 82, tem. 100.5°; evening, pulse 80, tem. 100.5°.
 6th day, morning, pulse 54, tem. 100° (this was the day of the attack of gastric veratrum); evening, pulse 84, tem. 100°.
 7th day, morning, pulse 84, tem. 99.5°; evening, pulse 84, tem. 99°.
 8th day, morning, pulse 82, tem. 100°; evening, pulse 76, tem. 99°.
 9th day, morning, pulse 86, tem. 99°; evening, pulse 82, tem. 100°.
 10th day, morning, pulse 84, tem. 100°; evening, pulse 88, tem. 100.5°.
 11th day, morning, pulse 76, tem. 98.5°; evening, pulse 76, tem. 98°.
 12th day, morning, pulse 76, tem. 98°; evening, pulse 82, tem. 99.5°.
 (Bowels moved of their own accord.)

13th day, morning, pulse 84, tem. 99.5°.

The highest reading of the thermometer observed was on the fifth day, at 1 P.M., viz., 101°. The highest pulse rate was 110, during the twenty-four hours following the operation. The highest rate of pulse observed after veratrum was begun was 100, the lowest 54 to the minute. After veratrum had been administered during twenty-four hours, the highest observed pulse rate was 95. The veratrum was steadily given night and day with great care, during nine days. The mean rate of pulse during this period, exclusive of the first twenty-four hours, was 81.5 per minute, as calculated from seventy recorded observations. I did not think it at all advisable to invite any motion by purgatives or enema. The bowels were left to themselves, and, being no doubt paralyzed, at once by the operation, by the subsequent inflammation, and by the repeated enemata of morphia, did not act until a late day. I think that some spasmodic contraction of the rectum was caused by inflammation in the retro-uterine cul-de-sac. The presence of inflammation here was indicated by pain attendant upon the exhibition of enemata.

In a previous case of ovariectomy (see No. of this Journal for July 1873), I did not use quinia so heavily, nor veratrum at all. From a long experience with the latter agent, I am led to believe that its use after this operation, if vomiting can be controlled or prevented, will very greatly tend to diminish the liability to peritonitis, while the exhibition of heavy doses of quinia will counteract the disposition towards septicæmia, especially apt to manifest itself where no drainage is provided for.

I am quite pleased with the employment of ether instead of chloroform. It is evidently a safer agent, and free from several disadvantages attaching to this latter substance. It does not produce vomiting, recovery from its effects is prompt, and it does not disorganize the blood or paralyze hepatic action as chloroform seems to do.

Nearly seven months have elapsed since the operation, and our patient is quite well; as active as before she was affected seven years since, and

free from all inconvenience. Her old chronic cough has almost entirely disappeared.

I think there can at this time be very little question as to the propriety of treating the pedicle by *torsion*. The day of the "clamp," it seems to me, is passed. If, however, a pedicle be broad, there is much danger of lacerating the coverings of the uterus, and unduly contusing the neighbouring peritoneum, if we attempt, as has hitherto been done, to twist off the whole pedicle at once, however securely it may be held. I therefore split it into two parts, and intend splitting it into three or even four digitations, twisting off each of these, one at a time, while they are all securely held by a proper instrument. I have devised a holder and twister, which I shall lay before the profession as soon as I have given them a trial.

CANTON, MADISON COUNTY, MISS., May 10, 1875.

ART. XV.—*Extirpation of both Superior Maxillary, Left Malar, and Pterygoid Process of Left Sphenoid Bones.* By A. E. CAROTHERS, M.D., of Saltillo, Mexico.

THE excision of both upper jaw bones is an operation which has been so seldom performed, that its feasibility as well as its utility, as shown by the results obtained, must be a matter of interest to the profession. The following case, which occurred in my practice in this city, was so satisfactory in the latter respect, that I am tempted to present it to professional notice through the columns of this Journal.

Crecencio Zuñega, æt. 36, a native of Mazapil, in the adjacent State of Zacatecas, a miner by occupation, came to this city to consult me on July 30, 1873. His account of himself is, that he has worked principally in smelting works for the reduction of silver-bearing lead ore, and has suffered in consequence from the usual results of colic, paralysis, etc. He says he suffered from a suppurating bubo twelve years ago, which was treated with cataplasms, ointments, etc., but took no medicine internally; in fact, has never taken any medicine in his life.

He commenced suffering from pain in an upper molar tooth of left side one year four months ago, which gradually extended to all the teeth and upper jaw bones on both sides, accompanied by a discharge of fetid pus from the alveoli. The pain finally became so severe as to deprive him of rest, and cause him to seek surgical relief.

Upon examining him, I found marked "*wrist-drop*" of both hands, a condition very common among men of his occupation. The left side of the face was considerably swollen, pushing the nose to the right side of the median line, presenting on that side the appearance of "*frog-face*." The vomer was entirely absent, the teeth were loosened in their sockets, and the palatine arch was nearly filled by the swollen soft tissues. There