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OVARIAN CYSTS

WHICH CONTAIN

TEETH, HAIR, AND FATTY MATTER.

BY

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ROBERT LEE, M.D., F.R.S., &c.

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Before the close of the last century, Schenkius, Schacher, Horstius, Le Rich, and Dr. Cleghorn had published cases in which ovarian cysts containing teeth, bone, hair, and fatty matter had been observed; and they had been deemed by them to be merely cases of extra-uterine or ovarian conception. Dr. Baillie was led to doubt the correctness of this view of the mode of formation of these cysts from the following case, which, he observes, "affords many reasons why we should be led to believe that the ovaria in women have some power within themselves of taking on a process which is an imitation of generation, without any previous connection with a male, and it is with this view that I proceed to relate it.

"In a female child, about twelve or thirteen years old, which was brought to Windmill Street for dissection, the right ovarium was converted into a substance, doughy to the touch, and about the size of a large hen's-egg.

"On cutting into the substance, I found an apparently fatty mass, intermixed with hair and an excrescence of

bones. This circumstance startled me very much, as I had always been led to believe that such appearances were a sort of imperfect conception. The case being very singular, I was led to pay considerable attention to the change in the ovarium.

"The fatty mass was of a yellowish-white colour—in some places whiter than in others; it was very unctuous to the feeling, and consisted of shortened or separated particles, not having the same coalescence which the fat generally has in the body. It became very soft when exposed to the heat of a fire, and penetrated through paper on which it was spread, and rendered it more transparent. This paper burned with considerable crackling.

"The hair with which the fatty substance was mixed, grew out of the inner surface of the capsule containing it; in some places in solitary hairs, but chiefly in small fasciculi, at scattered, irregular distances. Besides these, there were loose hairs involved in the fatty mass. Some of the hairs were of considerable length, even to three inches; they were fine, and of a light-brown colour. They much more resembled the hairs of the head than those commonly on the pubes, and they corresponded very much in colour to the hair of the girl's head.

"There arose also from the inner surface of the capsule some vestiges of human teeth. One of these appeared to be a canine tooth, one to be a small grinder, and two to be incisors; besides, there was also a very imperfect attempt at the formation of another tooth. These teeth were not fully formed, the fangs being wanting; but in two of them the bodies were complete. Each of them was enclosed in a proper capsule, which arose from the inner surface of the ovarium, and consisted of a white, thick, opaque membrane.

"There was a white, spongy substance attached to the capsules of three of the teeth. The membrane of the ovarium itself was of considerable thickness, but unequal in different parts; its inner surface was very smooth, and its external surface irregular. The uterus was smaller than it is commonly at birth; it was perfectly healthy in structure;

and on opening its cavity it exhibited the ordinary appearances of a uterus at the age of the child. The left ovarium was very small, corresponding to the state of the uterus. It clearly appears from this circumstance that the uterus had not yet received the increase of bulk which is usual at the age of puberty. The hymen was entire, and such as is commonly found in a child of the same age; a lanugo was just beginning upon the labia, not more than what is often found on the upper lip of a boy fifteen years old. Such are the circumstances of this singular case, and they present to the mind various points of consideration.

"The formation of hair and teeth is a species of generation; for, in fact, it makes a part of it, and strikes the mind as being very different from any irregular substance which is formed by a disease. This formation, too, takes place in a part of the body which is subservient to generation, and where a complete fœtus is sometimes formed. These facts corroborate the idea that the production of hair and teeth in the ovarium is a sort of imperfect impregnation. But when we take another view of the subject, there are reasons at least equally strong for believing that such productions may arise from an action in the ovarium itself, without any stimulus from the application of the male semen."[1]

Dr. Baillie stated, in the 'Morbid Anatomy of the Human Body,' published in 1797, that he had met with the same kind of fatty substance intermixed with hair, and the body of one tooth covered with enamel, in the ovarium of a woman about eighteen years of age. "In this case the uterus was rather less than its usual size in the adult when unimpregnated, and there was no membrana decidua formed in its cavity. It appeared, therefore, to be undergoing no change similar to what happens when there is an ovum growing in the ovarium or the Fallopian tube. The hymen, too, was perfect; the edge of the membrane being quite

[1] 'Philosophical Transactions.'

'The Works of Mathew Baillie, M.D.,' by James Wardrop, vol. i, p. 139. London, 1825.

sound and natural, and the aperture in it being remarkably small. These circumstances do not amount to demonstrative evidence, but still must be considered as a very strong confirmation of the truth of the opinion above stated."

The first volume of the 'Medico-Chirurgical Transactions' contains a paper by Mr. Abernethy, entitled, "An Account of an Uncommon Disease of the Ovarium." This was an example of an ovarian cyst, similar to those which Dr. Baillie had described; and Mr. Abernethy observes that "this case is curious rather from the rarity of its occurrence than from its nature. A similar fluid is secreted by the sheaths of the tendons and the bursæ mucosæ."

"I have in my possession," observes Dr. Merriman, "a preparation consisting of the ovarium enlarged, and filled with fatty matter, intermixed with hair, which has formed to itself a bed between the rectum and vagina. Had the woman from whom these parts were taken become impregnated, the ovarium must of necessity have been confined in this situation, and a tumour occupying a considerable space must, in consequence, have been formed in the pelvis, which would have proved a great obstacle to parturition."[1]

Two fatal cases are referred to by Dr. Merriman, in which difficult labour arose from the presence of ovarian cysts in the pelvis filled with fatty matter, intermixed with hair and teeth.

The ninth volume of the 'Medico-Chirurgical Transactions' contains "An account of a case in which some singular preternatural appearances were observed in the Ovarium and Female Bladder," by Dr. Edward Phillips. The patient was thirty years of age, and "from early life she had, at different periods, found a difficulty in passing her urine;" "but these attacks were but slight and transient." About two years before her death she was seized with inflammation of the bladder, and a fulness appeared in the left side of the hypogastric region, and afterwards "a large, indurated tumour, somewhat oblong in form, extending from the situation of the spleen to the umbilicus."

[1] 'Med.-Chir. Trans.,' vol. iii, p. 52, 1816.

"On opening the cavity of the abdomen, there escaped about two gallons of water mixed with blood. On the left side of the umbilical region, there was an ovarial tumour, rather larger than a human heart; the contents of which were a semifluid substance, a good deal resembling in appearance clouted cream. In the middle of this cream-like substance was found a tuft of hair about the size of a hen's egg. The surface of the tumour was nearly covered by clusters of hydatids, beautifully transparent and concocted like a bunch of grapes. On the broad ligament of the left side of the uterus, there arose a number of small, white tumours of the size of common peas. The uterus itself was not diseased. The bladder was very much distended, or rather plugged up with a substance similar to that which was contained in the ovarial tumour; and here also was discovered another large tuft of hair. The coats of the bladder were very much indurated, and particularly the inner coat. The urethra appeared to have no direct communication with the bladder; at the under and posterior part of which there was attached a small cyst, having the same cream-like substance before described, and also a quantity of hair, and, what is deserving of particular notice, there was a perfectly formed incisor tooth, having the enamel, and its fang firmly attached to the coats of the cyst. This cyst or cavity had a communication with the bladder by means of three small foramina, and it communicated also with the urethra on the anterior part."[1]

In the tenth volume of the 'Medico-Chirurgical Transactions,' Dr. Merriman has related two more cases in which parturition was rendered difficult by the presence of these ovarian cysts between the vagina and rectum; and Dr. Bostock analysed the sebaceous matter taken from one of these, and found it to consist of "a concrete animal oil, nearly in a state of purity, similar to butter or lard."

It does not appear, from the 'Medico-Chirurgical Transactions,' that any communication has been made to this Society on ovarian cysts which contain teeth, hair, and

[1] 'Med.-Chir. Trans.,' vol. ix, p. 427, 1818.

fatty matter, during the last forty years. They have not, however, during this long interval, ceased to attract the attention of the most eminent pathologists; and when opportunities presented, they have been subjected to more or less accurate anatomical investigation.

"There are a great number of cases of this peculiar condition of the parts on record," observes Dr. Seymour; "and one well known, described by Dr. Baillie in the 'Philosophical Transactions.' A case also occurred recently in St. George's Hospital; a woman, about thirty years of age, some weeks after delivery, having been admitted under the late Dr. Young, with symptoms of enteritis, which speedily proved fatal. The inferior portions of the small intestines were found inflamed, which inflammation appeared to have been excited by the presence of a tumour of the size of a large cricket-ball, which had been attached by a narrow neck to the posterior part of the left ovarium. Its proper coat was of a fibrous texture, and of a purple colour, and enclosed a mass of sebaceous matter, penetrated throughout with long, fine hair; after removing which, a full-grown incisor tooth was found attached to the fibrous coat."[1] The preparation of the parts is now placed upon the table of the Society.

Dr. Seymour was strongly inclined to believe that these growths in the ovaria were the "result of an imperfect conception in the mother of the individuals in whom they are found."

M. Cruveilhier has published delineations, in his eighteenth fasciculus, of various cysts of the ovaria which contained teeth, hair, and fatty matter; and the following are the conclusions which he has drawn from his elaborate researches:

"Eh, bien! les kystes pileux ovariques sont également le resultat de l'adhésion de deux individus, savoir, du produit de la conception qui est resté féconde dans l'ovaire, et de l'ovaire lui-même. Cette adhésion se fait toujours

[1] 'Illustrations of some of the Principal Diseases of the Ovaria,' &c., by Edward J. Seymour, M.D., 1830, p. 82.

avec fusion plus ou moins complète; si bien que des dents, des débris de mâchoires, des os plus ou moins informes, des lambeaux de tissu cutané et du cuir chevelu en particulier, garni de poils plus ou moins long, sont presque toujours le seul vestige de la presence antérieure d'un fœtus; et les kystes les plus compliqués sont l'explication toute naturelle des cas les plus simples, des cas de kyste ovarique, dans lesquelles on ne trouve que de la matière grasse et des poils."[1]

Four cases have come under my observation, in which ovarian cysts were found containing hair and fatty matter. Two of these cysts were in a natural state, and afforded the best opportunities that could be enjoyed, to examine their structure, and mode of formation in the substance of the ovaria. The other two cysts were in a diseased condition, being affected with dropsy and cancer, or having their coats disorganized by inflammation, suppuration, and ulceration.

In this communication I propose—1st, to describe in a succinct manner the appearances presented by the two cysts which were in a natural condition; and 2dly, the two ovarian cysts which were in a pathological state.

I. On the 5th of February, 1853, Dr. Martin, of Arlington Street, presented to me for examination the uterus and its appendages, removed from a woman, aged forty-three—the mother of one child, aged twenty—who had died the preceding day from cancer of the uterus. The os and cervix were partially destroyed by ulceration, and there was a hard, fibrous tumour imbedded in the muscular coat of the body and fundus. The left ovarium was enlarged to the size of a child's head; and the Fallopian tube, much elongated and adherent to the ovarium, was filled with pus. Two cysts nearly equal in size were found in the left ovarium, one of which contained purulent fluid, and the other a fatty-looking matter, with a great number of hairs loosely imbedded in it, varying in length from two to six inches.

[1] 'Anatomie pathologique,' par J. Cruveilhier, xxxvi livraison, p. 3, 1842.

The fatty matter, which was of a yellowish-white colour and of the consistence of honey, only adhered to the inner surface of the cyst at one point, and around this spot, and nowhere else, were hairs observed growing from the inner surface of the cyst. Some of these hairs were attached to the cyst by a root; but others through a considerable part of their length seemed to be attached at the middle part, both extremities being free and pointed. Some of the hairs found loosely imbedded in the fatty matter had two sharp-pointed extremities and no roots; others had one slender point, and the other extremity presented the appearance of having been cut across, without any bulb by which it could have grown from the cyst.

Some of these hairs have been preserved, and are now exhibited.

Dr. Bence Jones examined the fatty matter which filled the cyst; and stated that at the temperature of the living body, it must have been an oleaginous fluid nearly pure, which had assumed the degree of consistence which it possessed subsequent to the death of the patient and the cooling of the body.

The walls of the cyst were composed of three distinct coats. 1st, the peritoneal coat and a thin layer of the stroma or parenchymatous structure of the ovary; 2dly. a dense fibrous coat; and 3dly, a lining membrane, uniformly smooth, white, and glistening, except where the hairs and fatty matter were adherent to it, which portion was of a peculiar yellow colour, resembling the corpus luteum, and thick and hard.

II. On the 6th of October, 1833, I examined the body of a woman, who had died the previous day, the eleventh after delivery. Occupying the brim of the pelvis, there was an ovarian cyst of an oblong shape, and an inconsiderable size. An opening was made into the cavity of this cyst, which was seen filled with fatty matter, intermixed with hairs. To prevent the escape of the hairs and fatty matter, the opening in the walls of the cyst was closed; and the parts

were suspended in alcohol, and placed in the museum of St. George's Hospital, where they remained without being examined until November, 1859, a period of twenty-six years. The preceding case, and two others about to be related, which had occurred subsequent to 1833, made me determine to subject the walls of this cyst and its contents to the most careful anatomical examination. Having placed the parts in a shallow vessel filled with alcohol, I proceeded, with my small forceps and curved needle, and the dissecting lens which magnifies six diameters, to investigate the structure of the cyst and its relation to the stroma and peritoneal coat of the ovarium. It appeared that the cyst was imbedded everywhere in the stroma or parenchymatous structure of the ovary, like a Graafian vesicle. Between the outer surface of the cyst and peritoneal coat of the ovary, there was everywhere interposed a stratum of the parenchymatous substance or stroma. At the uterine extremity of the ovary the stroma formed a thick stratum. On examining the cyst itself, I found that, like a Graafian vesicle, it consisted of two distinct membranes or layers; the outer thick and dense, and the inner thin and transparent. These two layers of which the cyst was composed, were separated from one another very readily by means of the forceps and needle. Everywhere the cyst consisted of two coats, surrounded by the stroma of the ovarium and the peritoneal coat. There was seen adhering to the inner membrane of the cyst, at the outer extremity of the ovarium, a body with a slender neck, about the size of a nutmeg, of a yellow colour, like the corpus luteum; it was hard, but not bony, when cut into. The surface of this yellow body presented the appearance of a portion of human scalp, from which there were seen growing a number of hairs. Some of these when torn out were found to have roots, and to be in all respects organized like human hairs.

There were no hairs seen growing from any other part of the cyst.

The preparation of the parts and an accurate drawing by Mr. Roberts are placed upon the table of the Society.

This cyst, like the ordinary Graafian vesicle, consists of two layers; it is imbedded in the stroma of the ovarium like a Graafian vesicle, and the yellow body is seen growing from the lining membrane of the cyst, and to be in the situation usually occupied by the unimpregnated ovum. It appears to be a conclusion demonstrated by the appearances that the cyst is an enlarged Graafian vesicle, and that the formation of hair and fatty matter has taken place within the cavity of this vesicle.[1]

By what process, teeth, bone, hair, and fatty matter are formed within the Graafian vesicle without impregnation, I will not attempt to explain, or to remove this hidden process from "*the domain* of the wonderful." In the works of the Almighty there are no freaks to be detected, similar to those often observed in the actions of men.

A collection of the hairs is placed before the Society, and the following is the account by Dr. Noad of the chemical composition of the fatty matter found in the cyst:

"The following are the results of my examination of the substance I received from you, through Mr. Hooper.

"As it came into my hands, it was a clammy, cheesy-looking substance, matted together with hair; it weighed 77·3 grains.

"When placed in the water-oven it soon melted; and after remaining for several hours at the temperature of 212° Fahr., the weight fell to 16·5 grains. When removed from the water-oven, it appeared to be a bunch of hair saturated with fat.

"It was washed into a beaker, and digested with repeated affusions of benzole; by this means the hair was obtained perfectly clean, and weighed, when dry, 2·5 grains.

"The benzole solution, after standing some hours, deposited a small quantity of a cheesy-looking substance, and the clear liquid yielded on evaporation 12·5 grains of a yellow fat.

"The matter insoluble in benzole weighed, when dry, 1·5

[1] See the Plate, in which the appearances here described have been represented.

grain. It was divided into two parts; one part gave, by fusion with caustic potash, and subsequent treatment with hydrochloric acid, abundant evidence of the presence of *sulphur;* the other portion afforded all the reactions of an albuminous or protein compound.

"I regret that the quantity at my disposal was so exceedingly small, that I was unable to submit it to any further experiments.

"Roughly, however, the composition of the substance (as it came to me) may be expressed thus, in one hundred parts:

Water	78·60
Hair	3·23
Fat	16·17
An albuminous substance, having many of the characters of *casein*, and containing much sulphur	2·00
	100·00"

III. In November, 1842, I was requested by the late Mr. Gaskell to see Miss F—, aged twelve years, who had an enlargement of the hypogastrium. The catamenia had not appeared, and there were none of the symptoms of puberty present. About the end of October, 1843, the enlargement of the abdomen had greatly increased, and fluctuation was very distinct. On the 2d of November she was tapped by Mr. Aston Key, and a quantity of dark-coloured, gelatinous fluid, evidently the product of an ovarian cyst, was drawn off. After the fluid had been drawn off, the lower part of the abdomen was still hard and irregular, and a solid mass, the size of a hen's egg, was distinctly felt, the day after the tapping, in the epigastrium.

In July, 1845, the fluid had again collected, and the abdomen was very large. It was then proposed, by several medical practitioners, that the operation of ovariotomy should be performed; but, at my suggestion, recourse was again had to tapping. During the tapping, the canula being obstructed, the fluid ceased to flow, and on inquiring

into the cause of this, it was discovered to have arisen from a quantity of fatty matter and long hair. It was at once obvious that the dark-coloured, viscid fluid was flowing from a cyst which contained hair and fatty matter, and probably a jaw-bone and teeth.

The patient subsequently died at Ramsgate; and it was stated to me, that there was found in the abdomen a great mass of multilocular cysts and cancerous structure, with which were interspersed numerous long hairs and pieces of bone. The portion which I had an opportunity of examining left no doubt upon my mind that the stroma or parenchymatous substance of the ovarium had become affected with cancer, and that the cyst which contained the hair, bone, and fatty matter had become dropsical.

Dr. Cleghorn relates the case of a woman, who died ten days after being tapped. The right ovarium was found greatly enlarged, and had many cells containing hair, cretaceous matter, fragments of bone; and teeth; others gelatinous fluid.[1] This case has been referred to by Dr. Burns, as well as another mentioned in the 11th vol. of the 'Physical and Literary Essays,' at p. 300; in which the one ovarium contained many vesicles—the other contained a mass like brain, with bones and teeth.

IV. On the 9th April, 1858, Mrs. C—, æt. 28, in the fifth month of her first pregnancy, arrived in London from Singapore; and on the 10th consulted Dr. Allan, of Hyde Park Place West. She was in an exhausted condition, passing large quantities of pus with the urine. Dr. Allan received the following history of the case, drawn up by Dr. Little, of Singapore, her last medical attendant:

"I was called to see Mrs. C— about the end of 1855, and found that, although she was of spare habit, yet she had an abdominal protuberance which made her appear as if she were seven months pregnant. On examination I

[1] 'Transactions of the Royal Irish Academy,' vol. i, p. 80.

found a tumour occupying the lower region of the abdomen, and rather to the left of the mesial line. It was hard, round, and slightly moveable, giving the idea of a tumour fully distended with fluid. The general health was not good, appetite spare, and none for breakfast. Bowels rather costive. Much weakness and lethargy were experienced, with a feeling of bearing-down from the presence of the tumour. She was occasionally attacked with intermittent fever and neuralgia of the face, having had, in India, severe attacks of ague. Mixed with the urine, but afterwards deposited, was a copious white matter, which, after careful analysis, I found to be purulent. The history of the case was that Mrs. C— was married on the 25th of July, 1853. For some time previous she had been irregular in menstruation, both as regards time and quantity, and always it had been attended with pain. One month after marriage she noticed a tumour in the abdomen, which rapidly increased in size, and was attended with much pain and tenderness on pressure. On reaching Calcutta one medical gentleman pronounced her five months *enceinte*; another that she had a fluid ovarian tumour. She then visited Penang in September, and in October or November noticed certain movements in the tumour which were painful and startling. Lady friends there thought her in the family way; but the medical practitioner who attended pronounced the tumour ovarian. Long after (but the exact time not known) the movements had ceased, she observed a white discharge in the urine, which continued until I saw her in November, 1855. Seven months after marriage the menstrual discharge had returned, and has continued pretty regular as to time until within the last four months, during which it has not appeared. After a careful consideration of the case in 1855, I came to the conclusion that Mrs. C— had an ovarian tumour of a fluid nature, which was discharging itself by the bladder. At first I thought the pus was excreted from the kidneys; afterwards that there existed a communication betwixt the sac and the bladder. My prognosis was that the sac was

gradually emptying itself in a most unusual way, and that, if the evacuation could only exceed the secretion, the patient would recover. My treatment consisted in strengthening the general system by tonics of iron and quinine; subduing local irritation by fomentations, leeches, and blisters, especially over the left ovary, where pain and tenderness were often complained of; encouraging the flow of the menstrual fluid; and maintaining gentle pressure over the tumour and abdomen generally by an elastic bandage. Occasionally I had to prescribe a mild alterative for biliary derangement, and frequently laxatives. Under this treatment Mrs. C—'s health improved very much, and the tumour diminished slowly, but perceptibly, until July, 1857, when severe pain was felt in the neck of the bladder and meatus urinarius, with incessant calls to micturition. After this, profuse discharge took place from the urethra, to the amount of four tumblers of pus daily. This gradually diminished to seventeen tumblers in the month of October; eleven and a half in November; six in December, 1857; and now, in January, 1858, there is little more than one ounce daily. The discharge varies in consistence—thin at one time, at another thick and greenish, and of a most offensive odour; but the first was of thinner consistence than the last.

"To the astonishment of the lady, and to my surprise, one day, a large mass of hair, evidently fœtal, was abstracted from the urethra, affording great relief; and at future times several such masses of hair were abstracted, as well as small shreds of bone. I now, for several reasons, arrived at the conclusion that the communication with the sac was not into the bladder, but into the urethra; and that the tumour was not an ovarian cyst, but an extra-uterine conception, which was gradually discharging itself by the urethra, having been by utero-decomposition completely broken up. The feelings of the patient, and the abdominal movement while in Penang, were no doubt fœtal; and had the stethoscope been judiciously employed, the fœtal sounds must have been heard, and all doubt as to the case

removed. But the opportunity was allowed to pass by, and the fœtus died in the sac in the abdominal parietes; and when I first examined the tumour, every symptom indicated an ovarian cyst, and it was not until the hair and the small fragments of bone presented themselves, that I acknowledged the movements felt in Penang to be fœtal, and the case to be one of extra-uterine conception.

"At present, in January, 1858, the tumour is felt in the lower region of the abdominal parietes about the size of a large lemon. It shifts sometimes to the right or left of the mesial line, and increases and diminishes according to the collection of matter inside, which now averages ten ounces daily. Some urethral irritation is still felt, but nothing to what has been. With the matter a large proportion of clotted blood passes, and occasionally a hair or two. For several months no menstrual discharge has passed, which, with the enlarged breasts, darkening of the areolæ, and a fulness about the uterine region, makes me suspect that the patient may be again in the family way.

"The treatment during the last six months has been to allay local irritation, subdue general excitement, and counteract the depressing effects of the excessive and putrefactive discharge. In addition to local fomentations, the patient was taught to introduce the catheter into the sac to draw off the discharge, and clear out the sac with warm water and tincture of opium—latterly with warm water and a stimulating astringent injection composed of matico, myrrh, and lavender, with sulphate of zinc. I intended, when the hair had ceased to come away, and symptoms had shown that the contents had been discharged, to have injected with tincture of iodine, so as to have closed the sac; but owing to Mrs. C—'s departure, that, or any other means, must be done by others. Before any decided reduction of size had taken place, I recommended Mrs. C— to make three measurements of the abdomen. The highest, round the waist, and meeting at the umbilicus, was thirty-one inches and a half. The same was, in January, 1858,

reduced to twenty-seven and a quarter. The second, passing above the hips, and meeting between the umbilicus and pubes, was reduced from thirty-four inches and a quarter, to thirty-two inches and a half. The third, meeting over the pubes, fell from thirty-six inches and a quarter to thirty-three inches and a quarter. In short, Mrs. C—, while six months ago she had the appearance of being seven or eight months pregnant, has now no appearance of any abdominal enlargement."

"Dated SINGAPORE;
25th January, 1858."

From the 10th of April, 1858, to the 21st of May, Mrs. C— was under the care of Dr. Allan, and her sufferings during this period were intense. The pain she experienced chiefly arose from the passage through the urethra of numerous hairs coated with calcareous matter, a collection of which calculi, made by Dr. Allan, accompanies this communication. Mrs. C— stated to Dr. Allan, that while at Singapore, similar sharp-pointed and curved calcareous concretions were passed from the bladder, which led Dr. Little to conclude that there had been an extra-uterine conception, and that these were the bones of the fœtus which had been "by utero-decomposition completely broken up."

At one o'clock in the morning of the 21st of May, 1858, Mrs. C— was seized with puerperal convulsions. At two p.m. I saw her, in consultation with Dr. Allan; and at three, the fits continuing with great violence, we agreed that delivery was the only means that could be employed to save her life. From the extreme rigidity of the os uteri, the delivery was not accomplished without the greatest difficulty; but we at last succeeded by our combined efforts in emptying the uterus. No convulsions followed the delivery, and consciousness returned; but she died two days after.

I obtained permission, with the utmost difficulty, to examine the body; and did so in the presence of Dr. Allan

and Dr. Bence Jones. The preparation of the uterus, ovarian cyst, and bladder are now placed on the table of the Society. It will be seen that the uterus is in a healthy condition—that there is an ovarian cyst with thick walls on the left side, and that hairs are seen growing at one point from the lining membrane of this cyst—and that there is a considerable opening, into which a bougie has been passed, between the cyst and the urinary bladder. The right ovarium displaced contained the corpus luteum. None of the hairs in the cyst were coated with calcareous matter; but all those found in the bladder, and all that had escaped through the urethra during life, were encrusted with ammoniaco-magnesian phosphates. This is stated on the authority of Dr. Noad.

APPENDIX TO THE ABOVE PAPER.

Received March 10th.—Read March 13th, 1860.

In the autumn of 1859, I related the history of the last of these cases to John North, Esq., late Lecturer on Midwifery at the Middlesex Hospital. Mr. North then informed me, that about twenty years before, he had under his care a young lady who had calculus of the bladder, which was extracted by Sir B. Brodie, and that with the fragments of the broken calculus there were a small portion of bone, of an irregular shape, and two imperfectly formed human teeth. Mr. Charles Hawkins subsequently brought to me the 'Lectures on Diseases of the Urinary Organs,' by Sir B. Brodie, published in 1849, where I

found, at p. 262, the following account of this and other cases :

"In the year 1840, I was consulted with Mr. North respecting a young lady labouring under very aggravated symptoms of calculus of the bladder. The existence of the calculus having been ascertained, I proceeded to extract it by an operation; the steps of which I shall describe hereafter. On examining the bladder with the finger, previously to the introduction of the forceps, I ascertained that the calculus was adherent to it at the fundus. However, I seized it with the forceps, and with the application of a moderate degree of force, was enabled to extract it, though not without it having been broken into several pieces. These fragments were found to consist chiefly of the mixed phosphates; but among them were a small portion of bone, of an irregular shape, and two imperfectly formed human teeth. If you refer to the tenth volume of the 'Medico-Chirurgical Transactions,' you will find a case and dissection recorded by Dr. Phillips, which fully explains the nature of the case in question. The teeth and bone, being the result of an original malformation of the ovarium, had become attached to the mucous membrane of the bladder, and formed the nucleus on which the calculous matter had been deposited. A similar case occurred in the practice of Mr. Warner, and is described in the forty-ninth volume of the 'Philosophical Transactions.'"

Mr. North has since called my attention to the following note at p. 456 of Dr. Hemming's translation of 'Boivin on Diseases of the Uterus,' published in 1834.

"In this manner a cyst of the same kind opened into the bladder, and for a long time allowed the hair to pass with the urine; at last a body was extracted from the bladder, as large as a hen's egg, presenting at one of its extremities a shred of skin, containing hairs and a bone; in which was partly fixed a kind of tooth, resembling a small molar. The communication of the cyst with the bladder was ascertained by the finger passed into the

urethra. The person recovered. (Delpech, 'Chirurgie Clinique,' tome ii, p. 521.) In a similar case, Dr. Paul Manhall observed, on post-mortem examination, that the ovaria were united together into a cerebriform or fatty mass, containing an extraordinary quantity of hairs and fine teeth. The cavity which contained them communicated with the bladder." ('Journal complémentaire,' tome xxxv, p. 183.)

I related to the President of the College of Surgeons the last case detailed in my paper, and showed him the collection of calculi formed upon the hairs which had passed from the ovarian cyst into the bladder, and through the urethra during life. He had not met with any similar case. He described what he had seen, the same evening, to Mr. Lawrence, and this led to the following very interesting letter being communicated to me by Mr. Lawrence on the 9th of March, 1860, a considerable period after the paper had been presented to the Society.

"Whitehall Place;
"March 9th, 1860.

"My dear Lee,—Not having preserved any memoranda of the case I mentioned to you, in which calculous matter in a fragmentary and loose condition, intermixed with hair, had been removed from the female bladder, I can send you only such an imperfect account as can be supplied from memory, after the lapse of nearly half a century.

"The patient, a married lady and mother of three children, who had reached adult age some years previously, must have been nearer seventy than sixty years of age when she underwent the operation of lithotomy by Mr. Abernethy. One of her daughters, a single lady, who is now eighty-five, remembers the facts of her mother's case most minutely, and has kindly communicated them to her medical attendant, who has been so obliging as to favour me with the following narrative: 'Before the late Mrs. — was married even, she had some peculiar illness in Bath, and was under the care of Dr. Moisey, when an abscess formed connected

with that part of the body. At some time previous to the attendance of Mr. Abernethy and yourself, she had peculiar symptoms. On one occasion Dr. Baillie attended her; she had pain in the side; Dr. Baillie said it was liver. Leeches were applied; she became easier, and a small stone passed away. At the time of Mr. Abernethy's attendance, as much as a small saucer-full came away; many of the stones were as large as horse-beans, and there was hair amongst them. She says that you remained twelve or fourteen nights, and that on one occasion her mother told you she could jump up and run away. She became perfectly well after the operation, without any degree of incontinence or difficulty in retaining the urine.

"'The operation was performed in 1816, and death occurred in 1819. At some intermediate time the calculus which accompanies this was passed. The patient was very uneasy in the night; her daughter got up and gave her the chamber bed-utensil called a slipper. As the water passed, something hard was heard to drop into the vessel, and proved to be the calculus sent herewith. In the latter part of life the urine was frequently very fetid, thick, and sometimes ropy, so that death was probably hastened by the irritation of disease in the urinary organs.'

"My recollection of what was removed in the operation is that it consisted entirely of separate calculous portions, the largest being of the size mentioned in the narrative, the remainder gradually lessening down to minute particles. The latter were mixed with short hairs, so as to constitute a softish mass. There were several separate incrusted hairs.

"I remain, yours very faithfully,

"Wm. Lawrence.

"Dr. R. Lee."

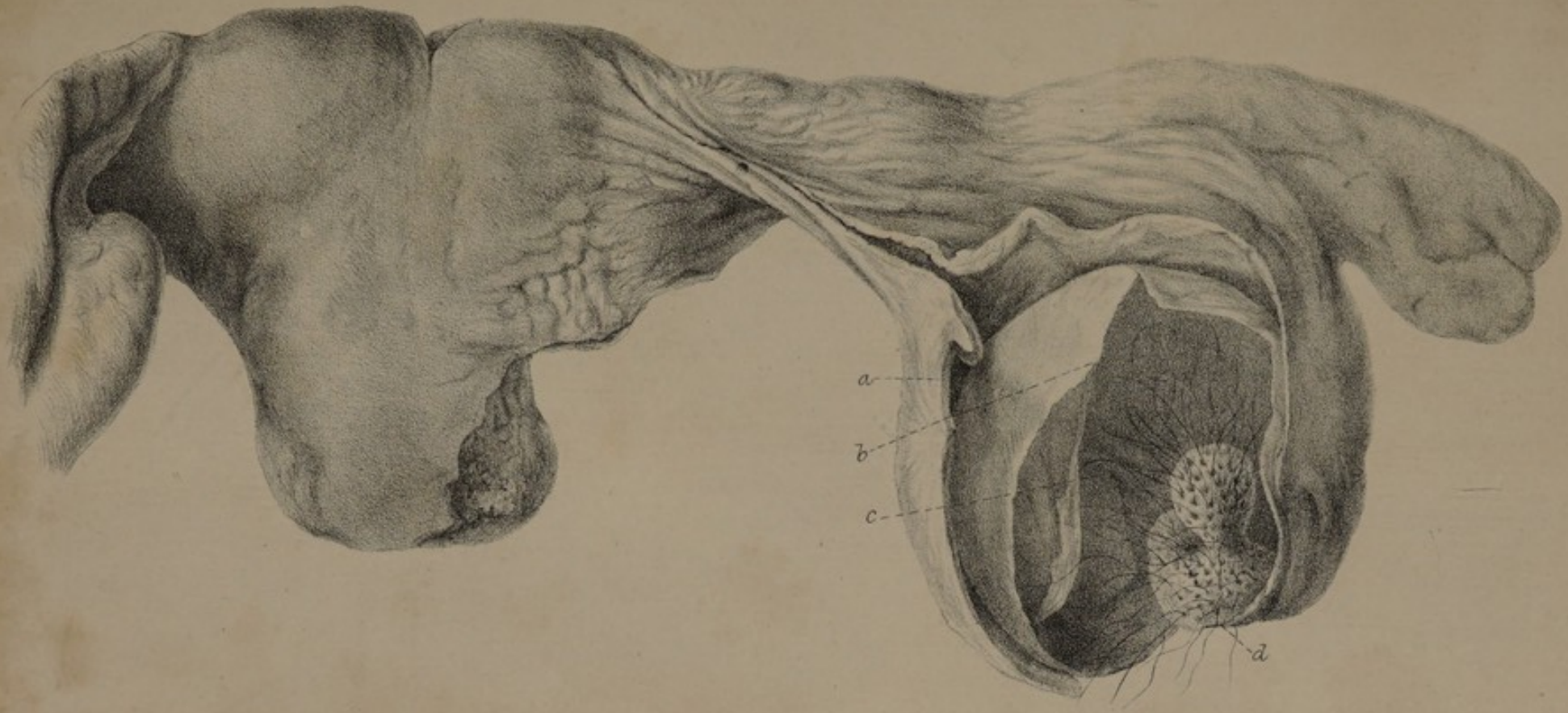
POSTSCRIPT.

Reference ought to have been made at p. 97 of this paper to a case detailed in the thirty-fourth volume of the 'Medico-Chirurgical Transactions,' entitled "An Account of a Dissection of an Ovarian Cyst which contained Brain, by Henry Gray, F.R.S."

EXPLANATION OF THE PLATE.

The drawing is an illustration of the first case recorded in the paper, and represents the uterus with the right ovarium, which contained the cyst.

a. The peritoneal covering and stroma of the ovary.
b. The fibrous coat.
c. The lining membrane of the cyst.
d. Point of attachment of hairs and fatty matter.



C.H.Ford lith. W.West imp.