TABLE IV.—*Mortality in the City of Canterbury from the following diseases. From the Register of Deaths. (Population* 18,398.

1857.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals (2 years).
Diphtheria						1	1		2	4	2	1	
Pharyngitis			1										
Stomatitis								1					
Croup	2	1		1									
Cancrum oris					1		1						
Scarlatina.....	4	2	2	2	1		1		1		2		
Totals	6	3	3	3	2	1	3	1	3	4	4	1	
1858.													
Diphtheria	3	2	2	3		3	1			1			26
Pharyngitis													1
Stomatitis									1				2
Croup	2	1			1						2	1	11
Cancrum oris													2
Scarlatina.....						1		1	2				19
Totals	5	3	2	3	1	4	1	1	3	1	2	1	61

Original Communications.

FIVE CASES OF OVARIOTOMY—THREE SUCCESSFUL; WITH PRACTICAL REMARKS.

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[*Read before the Harveian Society of London.*]

IT is not my intention to enter fully on the subject of Ovariotomy in this paper, but merely to relate five cases of ovarian disease in which extirpation has been effected, each possessing peculiar features, and therefore worthy of some practical remarks. The consideration of this dangerous operation has, during the past year, attracted the attention of many surgeons; and I believe, in this city, all the cases have been recorded faithfully. To further this plan, I now desire to record my experience of the past few months; my more extended experience on ovarian diseases generally, since 1830, has been from time to time honestly placed before the profession, either in the medical journals, or in my work *On Surgical Diseases of Women*. In that work, I have entered so fully into the most minute points of the operation, that it is not necessary to take up your time or attention by recapitulation. The work is in the library of this Society; and therefore every member can refer to it hereafter, if he pleases to do so.

CASE I. *Ovarian Dropsy, Multilocular; Extirpation; Cure.* Laura P., aged 20, married, without children, soon after marriage, two years ago, noticed an enlargement of the abdomen, which went on increasing until March 1858, when she had an attack of peritonitis, from which she soon recovered, but had a relapse. Again, at the end of May, she had a third attack. After this, I saw her with the late Dr. Engledue, and found her suffering from great debility, and the results of the peritoneal inflammation. I ordered tonics of quinine and iron; and these had the effect of much improving her general health. An examination now showed a great enlargement of the abdomen, which evidently was multilocular ovarian dropsy. It appeared to have adhesions on the anterior and right lateral parts. The menstruation was irregular.

It was evident that extirpation was the only thing which offered a hopeful result. I placed its dangers fairly before her; and, after due consideration, she elected to undergo the operation. She was accordingly admitted into the London Home on October 12th, 1858. After a few days preparatory treatment, I proceeded to operate on October 20th, assisted by my colleagues Dr. Priestly, Messrs. Nunn, Philip Harper, and others. Dr. Kidd administered chloroform. One hour before the operation, she took two grains of opium, and a glass of port wine. I made an incision from the umbilicus to the pubes, and gradually cut down to the peritoneum, which I then opened, and the cyst presented itself. I grasped it with strong vulsellum forceps, and let out a large quantity of thick albuminous fluid through a large trocar. Introducing my hand, and gradually working around the cyst, I broke down the adhesions, which were especially situated low down on the right side. There was only one of any importance, and this I tore through. The mass of cysts was now gradually emptied and drawn out of the abdomen. The pedicle was long and thin; a pair of calipers was tightly fastened around it, and the cystic mass was cut off. The whole of the fluid which had escaped into the abdominal cavity was carefully sponged out, and the edges of the wound brought together with iron wire sutures, inserted at intervals of half an inch. The pedicle was secured at the lower end of the wound, and retained there by the calipers, which were left on. The wound was now covered with wet lint and long strips of plaster; a broad flannel many-tailed bandage was fastened around the abdomen; and the patient was removed to bed. Hot bottles were put to her feet. As soon as the effects of the chloroform had passed away, she had one grain of opium, and was ordered to be kept well under its influence. Pulse 92. Iced port wine was given occasionally.

October 21st. She passed a quiet night; pulse 120; slight sickness. In the afternoon she had some pain, apparently from flatus; for which a tube was occasionally introduced into the rectum, when a good deal of wind was discharged.

October 22nd. Pulse 106. There was no pain. She had slight sickness. She was ordered to have some partridge, and brandy with soda water.

October 23rd. Pulse 100. She slept pretty well. The catamenia appeared.

October 24th. Pulse 90. The dressings were removed, and the wound was found healed by the first intention. She was ordered to take dilute nitric acid and decoction of cinchona three times a day.

October 27th. The calipers were removed.

She went on perfectly well, and without a single bad symptom; and now (March 1859) is in perfect health and has grown stout and ruddy, and menstruates regularly. At each epoch, the skin just over where the pedicle was secured breaks, and there is a vicarious discharge during the whole period; but, as soon as that is over, the skin heals up again.

REMARKS. The practical observation in this case is, that the patient was so ill from the repeated attacks of peritonitis, that, when I first saw her, I thought there was but little hope of her ever being well enough to undergo the shock of an operation, and nothing but generous diet and a course of quinine and iron would do her any good. Under this treatment she steadily improved; and, feeling most anxious to undergo the operation, had strong faith in a successful result. The nature of the cyst, which I now exhibit, will satisfy the members of the Society that no other mode of treatment could have offered any hopes of benefit; whereas tapping simply would have hastened death.

CASE II. *Ovarian Dropsy, Multilocular; Extirpation; Cure.* A. P., single, aged 26, in the early part of June 1857, perceived a slight swelling low down in the right side, accompanied with an oppression at the chest, and some pain between the shoulders. The swelling increased rapidly for the first month; and after that period much more slowly, though perceptibly. There was a good deal of nausea and sickness, especially in the morning. At different intervals she expectorated blood, but without cough. She underwent various kinds of treatment, but without benefit. In August 1858, she was placed under the care of Mr. Jackson of Sheffield, who immediately discovered that she had ovarian dropsy, and recommended her to apply to me. On October 2nd I examined her, and found that she was suffering from multilocular ovarian disease, and that there were probably no adhesions. Her general health appeared a good deal broken; I therefore ordered her some quinine and iron, together with a generous diet. I explained to her that there was no means of cure except extirpation; and, after due consideration, she elected to undergo an operation. Accordingly, her health much improved, on the 24th, she took some pills to open her bowels, and had a warm bath: and at 3 P.M. on the 25th, I proceeded to operate. An hour previous to the operation, she had two grains of opium and a glass of wine. The temperature of the room was raised to 70°. There were present Drs. Jackson and Aveling, and Mr. Barker, of Sheffield, and Messrs. Nunn, Philip Harper, Wratislaw, and Richards. Dr. Kidd administered chloroform. I made a small incision between the umbilicus and pubes in the mesial line, about four inches in length, and carefully divided the various tissues until I came down upon the peritoneum. This bulged out, from the amount

of effusion which was present in it. On making an opening into it, a large quantity of fluid escaped, and a large mass of cysts immediately appeared. I now punctured this with a large trocar, and emptied what cysts I could; but a very small quantity could be drawn off. The walls of the mass were so rotten as to break down under very slight pressure: I therefore was obliged to enlarge the opening, and then, with some trouble, managed to draw it out. The pedicle, which was very thick and soft, I enclosed in a pair of calipers squeezed as tight as possible, and then cut off. I then removed all the fluid which had escaped into the peritoneal cavity, and brought the edges of the opening together with iron-wire sutures, inserted at intervals of half an inch. The pedicle was retained at the lower end of the wound, and the calipers were left on. The wound was covered with wet lint and strips of adhesive plaster. A broad many-tailed flannel bandage was applied tightly around the abdomen; and the patient was put into bed with hot bottles to her feet. After the operation, the pulse was 100, and weak. She had port wine and iced water to drink; and when the effects of the chloroform had passed away, two grains more opium were given.

10·30. Her pulse was 110; she had no pain or distension.

October 26th. She had dosed at intervals, and had been sick three times. Pulse 115. The skin was warm. She had a little pain at intervals, apparently from flatus. Beef-tea, milk, and soda-water were ordered as diet; and two grains of opium were directed to be taken every six hours, if necessary, to keep her well under its influence.

She went on very well, having no untoward symptoms; and, on October 30th, I removed the dressing, and took out one suture and the calipers.

November 1st. I removed two more sutures. She progressed as satisfactorily as possible in every respect; and in six weeks left her lodgings quite well. At the present time (March 1859) she has since grown stout, and is in robust health.

REMARKS. This case was one of quick growth and of a bad form, so closely bordering on the malignant, that another three months would have produced so much mischief to the omentum and bowels, as to have precluded any hope of affording relief by extirpation. The nature of the mass, a sort of honeycomb, rendered any other mode of treatment quite out of the question; and the serious effect on the general health was so rapid and so severe as to threaten a speedy termination of life. We may, therefore, fairly consider that a life has been saved by the operation.

CASE III. *Ovarian Disease; Extirpation; Death.* Miss N., aged 21, unmarried, from Lubeck, in Germany, came under my care in August 1858. The account received from the medical attendant in Germany gives a clear account of her case, and is as follows:—

"Miss N. complained in her eleventh year of periodic returning pains in her stomach; though, by external examination, nothing could be perceived. After a long pause, in the spring of the year 1849, severe pains were again felt; and in the right epigastric region a swelling was discovered, which had a rough uneven surface, and did not change its position in different movements of the body. It was free from pain. The unevenness of the swelling gradually became less perceptible; and the presence of fluid showed itself, and assumed the appearance of encysted dropsy. The urinary secretion was good. In the summer of 1857, she fell, and pains came on in the abdomen, which on examination was found less pointed, and had become more level, the sides being expanded, and the parietes softer and less stretched. After some days, a flux came on, and after a time the collection of water decreased. The swelling in the right side was less to be felt than formerly. Gradually the water collected in the abdomen; and she complained much of the left epigastric region, where the swelling and pain have since remained." In addition to this, it may be remarked that she had never menstruated, and her general health was a good deal broken.

In August 1858, she came over to London, and consulted me. She was then in very tolerable health. On examination, a large multilocular ovarian tumour with fluctuation was found, more prominent on the left side than on the right. It filled up the abdomen, and was to a certain extent movable. There was no crepitation; and probably there were few adhesions. Upon a careful review of the whole case, I arrived at a conclusion that the removal of the cyst was the only thing which offered any hope of real benefit. I clearly pointed out the danger of the operation, and said that her case was not a favourable one; but that, on the other hand, no palliative treatment could be of any real benefit. The patient went away to consider about it, and did not return again for six months, when the tumour was much increased, and her general health a good deal broken up, she having been seriously ill during that time, with pain, etc., in the tumour. She was now very anxious to have an operation performed, and was accordingly admitted into the London Home, and underwent a course of mild tonics and preparatory treatment. On examination *per vaginam*, the tumour could not be felt by the finger, and the os was very high up, as if the uterus were drawn up by the tumour. The hymen was complete.

1859. Feb. 10th. At one o'clock, two grains of opium and a glass of wine were given. At 2 P.M., she was placed under the influence of chloroform by Dr. Kidd and Mr. Edwards. I proceeded to operate, assisted by my colleagues Messrs. Nunn and Philip Harper, and the visiting surgeons, Messrs. Wratislaw, Hubbard, Spencer, and Giles. I made an incision from the navel to within two inches of the pubes, and carefully cut down to the peritoneum, which was then opened to the same extent. The cyst then presented itself; and, rapidly passing my hand around it, I found that there were hardly any adhesions. I now punctured the cyst; and about ten pints of thick steotomatous fluid flowed away through the cannula. This fluid was mixed with a thick, pasty, fatty substance, which obstructed the cannula. I now attempted to draw the cyst out; but, not succeeding, punctured it a second time, and let off about five pints more fluid. As the cyst could not even now be withdrawn, I lengthened the upper end of the incision about two inches; and, by puncturing a third cyst, then succeeded in drawing the mass out by strong vulsellum forceps. There were three points of adhesion with the omentum, which were torn through. When the tumour escaped through the incision, it dragged the uterus out with it; and examination showed that there was no connexion of the body of the uterus with its cervix. The clamp invented by Mr. Harper was now fastened on to the pedicle close to the cyst, and the latter cut off. The uterus was returned to its proper position, together with the omental adhesions; the latter having been carefully wiped, and examined for any bleeding vessels. The pedicle was now brought to the lower end of the wound; and its edges were brought together with metallic sutures, inserted about every half inch and carried deep through the aponeurosis of the muscle, but avoiding the peritoneum. It was covered with wet lint and a few long strips of adhesive plaster. A broad flannel bandage was fastened around the abdomen; and the patient was put into bed. There was no escape of the intestines at any time of the operation. It was the left ovary which was removed. The operation was finished at 3 P.M. She now had two grains of opium, and was to have a grain every six hours. Pulse 80.

10 P.M. The pulse was 90. The skin was soft and moist. She had no sickness. Half an ounce of wine was ordered. She had a little sleep at intervals during the night, but was upon the whole restless, feeling that she could not breathe freely.

February 11th, 8 A.M. The pulse was 100. She had occasional pains in the abdomen, apparently from flatus. The stomach was slightly tympanitic.

3 P.M. The pulse had risen to 140; and there was occasional hiccough. She had no pain. The belly was tympanitic; the breathing more free, and without pain; and she could straighten her legs, which she could not do the previous night.

6 P.M. She suddenly fell into collapse, and sank at 10·20 P.M., being sensible to the last.

These notes were kindly taken by Mr. Wratislaw, the visiting surgeon in charge of the case.

A further examination of the removed mass showed it to contain a large quantity of loose hairs, mixed with a thick steatomatous matter. Hairs were also developed, in various proportions, over the whole internal surface of the cyst, and in many places thickly massed together. In the centre of the cyst there was also a development of bone, and more or less perfect teeth.

On the following day, at three o'clock (seventeen hours after death), Mr. Nunn made a *post mortem* examination, there being present Messrs. B. Brown, Philip Harper, Wratislaw, and Dr. Giles. On dividing the wires used in bringing the abdominal walls together, incipient adhesions were found, as well as pus in the track of two of the wires. The omentum was a good deal discoloured, of a darkish colour, also thickened and injected, and as though clotted. The parietal peritoneum was inflamed and scarlet in patches for some distance around the incision. Peritonitis seemed to have existed chiefly on the left side, where the small intestines were slightly agglutinated together. The recto-vesical pouch contained a little bloody serum. The pouch was intensely injected. A small quantity

of cheesy matter, which was contained in the ovarian sac, appeared on one of the intestines. No pus was found. The liver was adherent to the under surface of the diaphragm. The adhesions were evidently old, and not to be broken down. The kidneys were healthy. The heart was very small, and on the right side very thin—about the eighth of an inch thick. The lungs were perfectly healthy. The os uteri was situated in its normal position, and admitted a sound for about an inch. The neck of the uterus was situated about an inch from the body, and was connected with the latter by a small impervious band of membrane. The uterus itself thus floated in the pelvis, having no direct or continuous communication with the os itself, except through this membranous band. The mammæ were well developed.

REMARKS. This case is one of the greatest interest. The disease was evidently congenital, as evidenced by the bony growth; and the rapidity of its development, during the last twelve months, too clearly showed that death would soon follow. At the same time, no tapping could have relieved her, and no palliative treatment could have been of the slightest benefit. Although but little hope existed of successful result from extirpation, still it was the *only* hope; and the patient and her friends elected to run the risk—I think wisely so, because experience proves that, if there be no other organic disease, life is often prolonged or saved by extirpation. In this case, the small and weak heart evidently had a great deal to do with the death.

[*To be continued.*]

Gulstonian Lectures
ON
FEVER AND INFLAMMATION.

DELIVERED BEFORE THE
ROYAL COLLEGE OF PHYSICIANS, LONDON,
1859.

By WILLIAM ADDISON, M.D., F.R.S., Fellow of the College.

LECTURE II (*concluded*).

XIII.—TWO SPECIES OF FEVER.

IN the last Lecture, we said that the corpuscles of the blood derive materials of their growth and nourishment from two sources, namely, the atmosphere and the plasma; and that their excretions are discharged in two ways—partly into the atmosphere, as carbonic acid, and partly into the plasma. It follows necessarily that the blood-corpuscles may be disordered in two ways; namely, by injurious matter in the air, and by injurious matter in the plasma. Wherefore, if fever be the expression of disorder in the corpuscles of the blood, we should expect—because they may be injured in two ways—two forms of fever. And there are two forms of fever, designated respectively contagious and hectic fever. Having discussed the phenomena of contagious fever, we have now to speak of hectic fever.

The corpuscles of the blood, in common with other cellular bodies, have within certain limits a power of resistance against injurious agents. It is not every passing impurity of the atmosphere, nor every injurious change of quality of the plasma, that establishes symptoms of fever. Nevertheless, poisonous substances in the air do, we know, occasion contagious fever; and we propose to show that a sufficient debasement of the qualities of the plasma, by disordering the corpuscles, will produce hectic fever.

In necrosis of bone, it has been shown for what purpose inflammation arises; and why it fails, or is hindered of cure. The persistence of the hindering cause—the dead bone—gives chronicity or permanence to suppuration, ulceration, and fistulous openings in the flesh. It is notorious in these cases, and in the analogous ones of diseased joints, that hectic fever sooner or later appears; and the sooner, if the person with his permanent source of illness (the chronic suppuration), be also exposed to privations, hardships, or unwholesomeness of food. Again, in pulmonary consumption, where the blood is continually passing and repassing numerous places of suppuration, hectic fever appears. Numerous other examples might be given; but these are sufficient to show that protracted forms of inflammation—namely, chronic suppurations and ulcerations—are in some way antecedents of hectic fever. Now, when inflammation, suppuration, and ulceration are hindered and protracted, spoiled material from the places of suppuration may ebb back by the roots of the veins into the plasma.

In proof of this, we may refer to the great work of Rokitansky, his *Pathological Anatomy;* and we shall quote the thirtieth experiment related in the third series of our own experimental researches.

"Experiment 30. Select a small light coloured frog, with as few pigment-spots as possible, because these obscure what is going on in the vessels. Irritate the web of one of the feet by immersion in tepid water (97° Fahr.) for thirty seconds, and afterwards gently scratch it with the point of a needle, taking care not to wound or open any of the blood-vessels. At the expiration of an hour or two, upon examining with a microscope, several of the capillaries and small veins will be seen crowded with colourless corpuscles. Now let a weak solution of potash—one part of the alkali to three of water—be lightly brushed over the web with a camel's-hair pencil, immersing the foot in cold water immediately after. In blood-vessels thus treated, we have seen red corpuscles glued together, and lumps of colourless matter passing away from the sphere of irritation along the widening channels of the small veins. Or these morbid matters, becoming stationary, have been the means of dividing the current of the blood into two streamlets within the vessels."

Such an experiment as this proves that local changes in the qualities of blood may be produced in places of irritation; and if in places of irritation, then also in places of inflammation and suppuration. And it shows, we think, in a satisfactory manner, how the mass of the plasma may become distempered by any continual ebbing back of spoiled material from places of protracted suppuration.

No one can doubt that the fluid of the blood is altered, and may be distempered, by unwholesomeness of diet, and by neglect of the daily excretions by the skin, bowels, and kidneys. It is also evident that these common sources of distemperature of the fluid of the blood must operate not only in persons in health, but also in persons who may be afflicted with chronic forms of inflammation, such as are present in necrosis of bone, in diseased joints, pulmonary consumption, etc. And if, in these last mentioned examples, distemperature of the fluid of the blood from errors in diet, or other such causes, concur with distemperature from absorption of spoiled matter from places of chronic suppuration, then there will be *deuteropathy of the plasma*, or disturbance of the qualities of the fluid of the blood from two points at the same time; namely, unwholesomeness of food and absorption of morbid matter. And it follows from the physiological relations subsisting between the corpuscles and the fluid of the blood, that an increasing debasement of the qualities of the fluid *must* at length disorder the corpuscles.

But one of the chief points we have been arguing for, is the therapeutical relations of inflammation to the fluid of the blood. We have said that suppuration is a means whereby injurious matter is eliminated from the plasma; that granulations and pus may perform the office of a depurating organ vicariously. Now we are saying that chronic suppuration and ulceration will occasion deuteropathy of the plasma, and thereby fever. This seems an incongruity. A little consideration, however, will show that it is only seeming incongruity. Diet sustains life and health only by measure; it is pathological in excess and by deficiency. Heat or temperature contributes to life and health only by measure. Oxygen, an essential constituent of the atmosphere, is an element of health and life only by measure; any great variation from a mean amount is pathogenetic. Too much or too little would equally occasion disturbance of health.

So likewise of the matters we are discussing: the process of repair in the commonest injuries has its pathological as well as its therapeutical aspects. The reaction upon which cure depends may be too much, or too little, or too long about. Granulations may be languid, or indolent, or deficient; or they may luxuriate, and usurp the place of fibrous tissue when fibrous tissue is needed for reparation. And fibrous tissue may hold its ground when osseous tissue is demanded for cure. This is sometimes the case in fractured bones. In ordinary contusions, great swellings appear and disappear. In their appearance, matter from the plasma of the blood must have become stationary in the part. In their disappearance, this matter must have been absorbed again into the blood. There must be, therefore, in these cases, in some way or other, a ready passage for elements from the injured tissue into the fluid of the blood.

Analogously, inflammation, as a depurative reaction in distemperatures of the fluid of the blood, may be hindered and interfered with in various ways. There may be too much or