Contributions to British Gynaecological Society : session 1902-3 / by J. Halliday Croom.

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J. HALLIDAY CROOM

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BY

J. HALLIDAY CROOM

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TO

DR. MACNAUGHTON JONES,

IN SMALL ACKNOWLEDGMENT

OF MUCH KINDNESS DURING

MY PRESIDENCY.

INAUGURAL ADDRESS.

GENTLEMEN,—It is my great pleasure and privilege in assuming the prominent position in which you have been good enough to place me this evening, to thank you most cordially for the honour you have done me. I accept this position not on any personal merit whatever, but purely and solely because in selecting me you wish to do honour to the School to which I have the privilege to belong. Nearly all the members in the gynæcological department of that School are Fellows of the Society, and in their name and my own, I offer you my most cordial thanks for honouring my School through my humble self. I think I may safely say that the Edinburgh School of Medicine, in the person of Sir James Simpson, was, if not the founder, at least the pioneer in gynæcology. When I think that the chair which I now occupy was adorned by his successor, my friend and master, Professor Simpson, I feel that you have called me to a very honourable position indeed. Nor is my burden of responsibility lightened when I think of the many other distinguished men who have presided over this Society, from its foundation till now, except it be by the thought of the kind indulgence which I feel sure you will extend to me, and on which I now cast myself. It will be my constant and utmost endeavour to do my best, if I cannot enhance, at least not to sully the fair reputation of this Society—for I think no one will question for a moment the admirable work which this Society has accomplished from its inception till now. It is the only Society, so far as I know, that has devoted

itself entirely and purely to gynæcological work, and it has been rich in ample and useful material. The discussions have been uniformly interesting and instructive, and no journal I know of contains a more complete synopsis of gynæcological work generally than does the JOURNAL OF THE BRITISH GYNÆCOLOGICAL SOCIETY.

Since the early days of last century, gentlemen, there has been magnificent progress in the sister art of obstetrics ; but, if you look back, it will be apparent to you that all the operations performed, nay more, the very instruments themselves used in performing them, were all foreshadowed ere the last century dawned. With the revolving years, of course, there have been mighty improvements ; improvements in technique, in operation, and in the instruments. But yet, great though these improvements have been, no very original operation, no absolutely original instruments, have been devised as far as obstetrics is concerned. The forceps have been modified, altered, improved, beyond a doubt. The scope of their use as a life-saving instrument has been enormously increased ; but yet the forceps is two centuries old at least. The operation of embryulcia has been improved in various ways, but the operation of embryulcia is as old as the times of Hippocrates. The operation of turning is as old as Ambrose Paré, and the induction of premature labour was a recognised operation before last century began. The operation of symphysiotomy as originally suggested by Leverin Pineau in 1575, or as modified by Segault and Le Roy in 1758, was an operation which at that time was with justice condemned, but, as recently re-introduced, it has, in all probability, an unquestionable future before it. The American operation of gastro-elytrotomy is an improvement upon an operation which was introduced by Jorg in the beginning of the century. Though these operations in more or less crude forms were practised before the last century began, it is needless to point out to you the great improvements in all these operations. Axis traction forceps render delivery possible with almost scientific accuracy. A

closer acquaintance with the mechanicism of labour and an early recognition of pelvic deformities has made it possible for the practitioner now to avoid a sacrificial operation by the induction of premature labour, or the performance of Cæsarian section, and to recognise the necessity of these operations and to undertake their performance while the patient is yet unexhausted and her tissues uninterfered with, and not to wait as formerly, till the patient is exhausted by futile attempts to deliver in some other way. Cæsarian section, thanks entirely to the work of the gynæcologist, has made enormous advances. It is now possible to deliver a woman with extreme pelvic deformity by this method, or its various modifications, with a very small mortality indeed; whereas at the beginning of the century the mortality could not be much less than 90 per cent.

Perhaps the greatest of all improvements is not in operative obstetrics, though that is great enough, but rather prevention. One is struck with the enormous advance of preventive medicine generally in all directions; the prevention of small-pox, typhoid, diphtheria, and so forth. But preventive medicine has advanced in obstetrics as well. At the beginning of the century puerperal fever was the scourge of our lying-in hospitals. Now the death-rate has been reduced in properly-conducted hospitals, so far as puerperal septic fever is concerned, to practically *nil*. It is true that in private practice it seems to go on unabated. Dr. Cullingworth has drawn up statistics pointing out this very significant fact.

To what are all these advances due? What has made those advances possible? In the first place, anæsthesia has made it possible to perform the operations to which I have had occasion to refer with greater care and skill, and has helped materially to make Cæsarian section the success it is. And the other potent factor in rendering these operations safe, and in reducing mortality, is the almost universal use of antiseptics in hospitals and in private practice.

All the operations to which I have referred were prac-

tised at the dawn of last century, and now we enter on a fresh cycle of time, fully equipped to meet and successfully cope with any obstetrical complication that can occur. Beyond instrumental interference we are now in a position to deal with hæmorrhages on a more scientific basis than ever ; and the scourge of septicæmia, which in the beginning of last century sheltered itself under the name of puerperal fever, though, alas ! still prevalent, does not inspire us with horror. We recognise the scource of infection, and with the advances of preventive medicine we can to a very great extent, in hospitals at all events, prevent it being the scourge it once was. A puerperal death now from septicæmia is one that we must put down to some neglect somewhere. It is not an accident, nor is it a specific fever, and we must regard septicæmia occurring in child-bed just as we regard pus in a wound as being altogether preventable.

Obstetrics must always play an important part in the life of every practitioner. It is absolutely essential that every general practitioner should be acquainted with all the details of the work, and it is something to be able to say nowadays that midwifery has so far advanced that, save with one solitary exception, every complication can be safely and successfully dealt with. To every rule there is the inevitable exception. In this case there is one likewise, for we have still left to us one terrible complication of pregnancy, parturition and the lying-in period, namely eclampsia. There one can lay down no very definite lines of treatment, and can hardly ever anticipate with anything like certainty a successful issue. And it is not because this complication has not received most careful study, but because it is shrouded with so many difficulties, that hitherto a uniformly successful management, or a comparatively uniform management, has not yet been attained. And so it comes about " with the process of the silent years " that midwifery can now be taught as an accurate science and art. But the process of evolution has been very slow.

But, gentlemen, if we come to look at the sister sub-

ject of gynæcology, its history and development are very different. Gynæcology is, comparatively speaking, but a recent development, and yet, in a charming book published just lately by Dr. Mackay, he gives us at first what seems to be rather a solecism, namely, a "History of Ancient Gynæcology." Considering it from the earliest developments, he has placed before us a very interesting and exhaustive account of ancient gynæcology. Beginning with the "Papyrus Ebers," the oldest medical work extant of Egyptian medicine, he has gone through the works of the Hindoo, the Greek, and the Roman writers, down to the days of Paulus Ægineta. The anatomy of the pelvic organs was then known in a very crude fashion, and their physiology is summed up in the terms, "the uterus is called the sleeping chamber, the cervix uteri the porch, the ovaries the store-room, the vagina the outer house, the hymen the virginity, the labia majora the hinges, the labia minora the doors, and the clitoris the key." Physical examination of these organs also was not unknown in a rude manner. There were specula, and even sounds. Even pessaries were known in these early days. They consisted sometimes of balls of wool and pieces of pomegranate. Surgical interference in ancient times was seldom had recourse to. From the most ancient times onwards, however, the treatment of the uterus and its adnexa was mainly by means of medications of various kinds. It is true in some of the Hindoo works abdominal section was described as being practised for intestinal obstruction; the Alexandrian surgeons operated on the liver, the Cæsarian sections were successfully undertaken by the Romans and Jews. Yet for all practical purposes gynæcology until thirty years ago has remained a subject whose advance has been slow and uncertain. While it remained in the hands of the physicians it made exceedingly small progress, and it is really only since the development of abdominal surgery that gynæcology has made any serious progress. It has, gentlemen, for ever passed away from off the shoals and

quicksands of uncertain medicine into the sure waters of surgery, and it is to be trusted that it will ever remain there. Perhaps, like every comparatively recent development, it may have passed too rapidly and too suddenly into the hands of the surgeon, and probably on that account it may have suffered at first from the *nimia diligentia* of the surgeon; but there can be no question whatever that some of the most brilliant results in surgery have fallen to the lot of those who practise gynæcology. While obstetrics has advanced slowly and surely, gynæcology has leaped at once almost into the fore-front of our profession. In every essential point it has become an absolutely integral part of surgery, and nothing is more striking than that a branch of medicine which in my lifetime has been purely in the hands of the physician, has drifted entirely away into those of the surgeon. In our own hospital the appointment which has been known as the appointment of Physician for the Diseases of Women has been cancelled, and now he who would aspire to treat such diseases in the hospital, must assume the title of gynæcologist, and *ipso facto* be a surgeon. In Paris it has gone still further, and now gynæcological operations, no matter what their nature may be, are in the hands of those who practise general surgery. Now, before going further, it must be apparent that the teaching of the two subjects, obstetrics and gynæcology, must be in some relation to one another, because although it is unnecessary that the obstetrician should operate, it is necessary that the operating surgeon should have some knowledge of the diagnosis of pregnancy, and a lack of this has given rise to more mistakes than one cares to refer to.

Obstetrics must ever form an integral part of the instruction for students, because it must always remain an important part of the work of every general practitioner. It is a totally thing different with gynæcology. Gynæcology has become a specialist's work, pure and simple, just as much as the eye, or the ear, or the throat, and although every gen-

eral practitioner must know and of necessity understand how to treat conjunctivitis, or an aural catarrh, or a relaxed throat, he is not expected to be able to perform iridectomy, or do a mastoid, or operate upon the throat. In the same way a general practitioner must know a little of gynæcology, but the great bulk of it, the major operations, the minor plastic operations, must and ought properly to be in the hands of a specialist. Therefore, I believe that if gynæcology is to be taught properly it must be taught as a special subject, not as a branch of clinical medicine or surgery at all, but entirely in a special department, as eyes, or ears, or throat, or anything else. Until this is the case, satisfactory teaching will never be accomplished. To say that a student can get even a smattering of gynæcology by coming once a fortnight to a clinique, whether that clinique be limited or unlimited, is to say a great deal too much. The teaching of gynæcology in a general hospital as part of a general curriculum, and as a necessary part of clinical medicine or surgery is contemptible. To teach it even in the simplest way a man ought to have a daily course of instruction for three months. Even then the information will be superficial.

But, gentlemen, I must not trespass on your patience by going any further into the question of how our subjects should be best taught, though, as you may readily understand, is is to me a matter of extreme interest, and one which I earnestly trust will soon receive the attention it deserves from those upon whom falls the responsibility of arranging this course of study for the future generations of medical students.

I pass now to a brief consideration of some operative procedures.

What used to be a vexed question, viz., the removal of the ovaries for inflammatory disease, we must now regard as having assumed a definite position, and we note with satisfaction that the indiscriminate removal of the ovaries for all sorts of inflammatory conditions has fortunately ceased. This is only rational, for we must ever bear in our minds

that in dealing with diseases of the reproductive system in women we are dealing with organs which themselves perform a function and go through a course of changes which are unknown to any other organ in the body. Menstruation, as you know very well, is a function which has no counterpart in human economy. The relation between rest and pain is one of the best recognised axioms in surgery. To rest an organ is to relieve it. One of the greatest difficulties in dealing with diseases of the heart is that the organ is never at rest. One of the difficulties in dealing with the bladder is that it is never at rest; and so on with the stomach, and various other organs. But, apart altogether from the total unrest of these organs, we have superadded in the female reproductive system not only a constant cycle of changes, but also an entire renewal of the lining membrane of the uterus every month. Whether we believe in the theory of Sir John Williams that the whole of the membrane is shed off, or in Kundrab Engelmann's that the whole of the mucosa is shed off, or Moricke's theory that none is shed off at all, the fact remains that a very profound and marked change takes place in this membrane monthly. And if we recollect further the changes in the Fallopian tubes, and the remarkable changes in ovulation, we must realise that the line of demarcation between physiology and pathology is very dimly marked. Let the following be accepted as a fair representation of what occurs in menstruation, namely, that the mucous membrane becomes swollen, puckered, thrown into folds and roughened; that the orifices of the uterine follicles, before hardly discernible, are easily seen with the naked eye; that the deeply injected capillaries are seen running in lozenge-shaped loops round the follicular openings; that the swelling of the mucosa affects all its elements; that there is a proliferation of the epithelial cells on the free expanding surfaces, as well as of the lining of the follicles; and that the interglandular connective tissue shows increase of the number and size of the corpuscles. Further, that this hyperplasia of the uterine mucosa reaches

its height when the catamenia is due, that the cavity of the uterus is now entirely filled up, and that when the day has arrived, the mucosa may be said to be in a state resembling acute catarrh ; that the cellular elements near the surface become the seat of cloudy swelling, that the connective tissue corpuscles become swollen and cloudy, that the epithelium within the follicles becomes also cloudy ; then, with a step further, fatty degeneration sets in, that the disintegrated elements give way, capillary tubes are broken open, follicular walls give way, and that uterine contraction takes place and drives the blood from the muscular wall into the mucous membrane, and so hæmorrhage sets in. This is a very gentle passage from physiology to pathology, and almost what one might call a pathological condition occurring monthly. We must consider it a monthly miniature pregnancy ; for weeks a preparation, for days an anticipation, and the hæmorrhages as the tears the uterus sheds of disappointment. If we consider this matter there will be very little difficulty in understanding why diseases of the uterus and ovaries do not lend themselves so readily to cure. And this, it seems to me, is a matter that is so often overlooked in treating these questions. It is no doubt perfectly true that in those persons who are favourably situated, where the condition of inflammation, superadded to the ordinary menstrual changes, can be minimised by rest, mental, physical and sexual, the cure of inflammatory conditions can be to a very great extent achieved. But there is, and always must be, a large class of the community to which these conditions of rest are inapplicable, and to whom the reproduction of the species is of secondary consideration, and to those cases, therefore, there will always be the reasonably warrantable surgical interference. In respect of the dysmenorrhœa associated with these conditions, that likewise in those who are in circumstances to undergo it will always be amenable to local though not surgical treatment, but for dysmenorrhœa and that only removal of the ovaries for inflammatory conditions is a question of very serious and

weighty consideration and demands the most careful safeguarding.

I would like to divide the surgical gynæcological interference into at least three classes. The first class is of cases where surgical interference is necessary and includes, to begin with, ovariotomy. An ovarian tumour, no matter what its nature, or what its size, unquestionably produces ill-health, and ultimately, if there be no interference, almost certain death, and therefore, beyond any possibility of a doubt, it ought to be removed. Experience has taught us that anything like tampering or temporising with an ovarian tumour is a mistake, and after its diagnosis its removal becomes imperative. In the same class I would include all forms of pelvic suppuration. Whether suppuration be in the tube or in the broad ligament, there can be no question at all that true surgery demands that the suppurating mass ought to be removed without delay, and the extensive use of the vaginal route has shown us that this can be done with the utmost safety and with most satisfactory results. Once more in this category I would place extrauterine pregnancy. Gynæcology has shown within very recent years no more remarkable life-saving operation than that of dealing with tubal pregnancy. The clearing up of extrauterine pregnancy has undoubtedly been one of the most noteworthy advances in pathology, anatomy and surgical procedure that the last thirty years have shown. Till the clearing up of this question, hæmatoceles, so-called, were attributed to all sorts of causes, but we now know that the commonest cause of hæmatocele, whether the hæmatocele be extraperitoneal or intraperitoneal, is an extrauterine pregnancy. The clearing up of the question of extrauterine pregnancy has been nothing less than remarkable. We now can exclude an ovarian pregnancy practically, a primary abdominal pregnancy practically, and reduce such pregnancy to tubal, differentiating the three varieties, interstitial, in fundibular, and ampullary, and it is practically in the two latter that surgical interference has become so striking.

That many cases of early extrauterine pregnancy, whether in the form of tubal abortions or in the form of very early tubal pregnancies, are absorbed, I have no doubt ; but when a tubal pregnancy has been diagnosed before rupture, which can now with improved knowledge be done with considerable certainty in the majority of cases, its removal becomes an urgent necessity ; and even if it be left to go on to rupture, surgical interference, if promptly had recourse to, offers in most cases the only possibility of cure. These sets of conditions seem to me those in which there is no option whatever about surgical interference, which the brilliant records of the past thirty years fully justify us in adopting. The surgical method is the only method of effecting a reasonable cure, and therefore for the preservation of life it is necessary that the patient run the risk of the operation, or else face the alternative of death.

The most severe critic of surgical gynæcology can never for a moment deny that the latter half of the past century will ever be remarkable for these three great triumphs of surgical art ; triumphs which have, as all true surgery should have for its aim, not only the alleviation of suffering, but the distinct prolongation of healthy life. With regard to these three conditions at least, there can be no manner of doubt. All the three are epoch-making events in the progress of gynæcology.

Let us look now at another class of disease in which surgery claims its triumphs as well. There is no form of tumour that is more common than the various varieties of fibroids. This is neither the time nor the place to discuss the varieties of them ; but I think I may safely say that the effects which they produce upon the system are mainly either by mechanical pressure on neighbouring organs, or the hæmorrhage to which they give rise, reducing the patient and making her liable to other intercurrent diseases. They are not often fatal, and it is an interesting fact to know that those that are most hæmorrhagic are usually the smaller, which can be dealt with readily enough, and which have

been known to and recognised by gynæcological surgery since its commencement—I mean polypi and polypoid fibroids. But the effect of pressure, say on the ureter, renders them a very serious complication indeed, not to speak of the degenerative changes which render removal imperative. In judging of them it is not only or always that hæmorrhage is the criterion, but rather their recrudescence in later life, or their rapidity of growth, must guide us in judging of them. In the larger tumours, especially those that press inordinately on organs, hæmorrhage is not the prominent feature. It is but seldom that a fibroid, considering their enormous frequency, is found to absolutely shorten life. It is very seldom one can point to a death directly from a fibroid. Hence, therefore, gentlemen, in dealing with fibroids we have got to keep before us distinctly that the surgical method of dealing with them is by no means an absolute necessity, or, in other words, the mere fact that a woman is the subject of fibroid tumours does not imply that she is necessarily an appropriate subject for surgical operation. It is often, very often, an operation of selection, of preference; an operation done with a view to aid the patient's comfort, seldom to save her life. Now in dealing with those benign, homogeneous tumours surgery is rapidly reaching perfection. I do not wish to detain you by going into any details of the various methods of removing fibroid tumours, or operations on them, either by hysterectomy or myomectomy, but the performance of a hysterectomy by Kelly or Doyen, or Segond, is no doubt one of the most magnificent surgical sights one can see. The rapidity with which it is done, the little loss of blood, is little short of marvellous. But then we must remember that the operation is undertaken for what may be, and is in the vast majority of cases, a practically harmless disease. There is a principle laid down by some surgeons, that everything that is unnecessary or redundant should be removed. Some have gone as far as to say that because a uterus has ceased functioning it may as well be removed. Some have gone as far as to

say that if you have a redundant piece of uterus it had best be removed, because it is always a focus for morbid action. But surely this is a principle which can be carried too far, and when you consider the risks of the operation, the mental distress a woman must go through before the operation is undertaken, and the awful discomforts afterwards, not to speak of the mental effects of the removal of the entire uterus, I think these operations ought to be carried out with due regard to their absolute necessity. I have visited many cliniques at home and abroad, and I am bound to say that I saw fibroids removed constantly, without any obvious reason whatever, but simply because they are fibroids. A varicocele is a morbid condition, but everybody does not wish a varicocele interfered with, unless it gives rise to painful symptoms. A floating kidney is no doubt a troublesome thing, but, until it gives rise to troublesome symptoms one does not choose to have a lumbar incision, and the kidney sewn up. A retroverted uterus is sometimes a source of trouble, but surely one does not open the abdomen and perform ventrofixation for every retroverted uterus. And so it is with such harmless tumours as fibroids.

I have not referred specially to whether fibroids are to be dealt with by the abdominal or vaginal route. In either case the advances of surgery have been most remarkable, but perhaps the advance of vaginal hysterectomy has been as great and as marked as the advance of abdominal hysterectomy.

This brings me to the third class of cases with which I specially here wish to deal, cases which are, as the years go on, increasingly urgent, I mean cases of uterine cancer. No doubt, in a suitable case, uterine cancer, whether of the cervix or of the fundus, but preferably of the fundus, can be dealt with with ease and satisfaction. The operations of Segond and Doyen have rendered this an absolutely safe procedure. The operation is performed constantly by all of us who are engaged in this department of work, and when we consider the enormous prevalence of cancer of the uterus.

it is not matter for surprise that we should all be anxious to do our best for the unfortunate sufferers. After mammary cancer the uterus is by far the most frequent seat. I believe I state the case very much under the truth when I say that at the present moment there are at least 8,000 women, probably a great many more, suffering from uterine cancer in the United Kingdom. Of all women who die of cancer one-third die of cancer of the uterus; and the cervix, like other ostia, such as lip, pylorus, cæcum and rectum, is a frequent seat of it. Alas! there can be no question that it is very considerably on the increase. According to the Registrar's returns for 1895, out of a million population 755 died of cancer. Whatever theory one holds as to the essential nature of cancer, whether the evolution theory or the parasitic theory, it matters very little, so far as we at present know, in the ultimate issue of operative interference. No wonder that we have recourse to every suggestion with a view to relieving the agonies, and averting its inevitably fatal result. No wonder that the best of men are engaged every day in investigating its nature and devising remedies, local and general, medical and surgical, for its relief and cure. But what I am concerned with here is the surgical interference by means of vaginal hysterectomy. I have just said that there is no more satisfactory, no more rapid, no more uncomplicated operation when carefully performed, than vaginal hysterectomy, so long as the uterus is of moderate dimensions and fairly mobile. Here we have before us an operation undertaken for an inevitably fatal disease, and such diseases as ovarian tumours, tubal pregnancies, and pelvic suppurations, sink into insignificance in face of this dire and fatal disease. An ovarian tumour may last long enough and be relieved; an extrauterine pregnancy may sometimes come to a happy issue without an operation, and a pelvic suppuration may itself burst and get spontaneous relief, but, alas! no such hope can be held out for cancer. Therefore we are bound to try every means in our power by surgery to eradicate this disease, and as yet there has nothing better

been suggested than vaginal hysterectomy, except leaving the case alone. I have elsewhere published in detail my results in vaginal hysterectomy undertaken for cancer, cases selected on the most favourable terms, and yet I have been unable to show a prolongation of life, or indeed an easier death. Others have been more fortunate. Where the uterus is movable, where the bladder is unaffected, and where it is possible to be sure of that, where there are no infiltrated glands—if ever by any possible chance we be sure of this, which, I think, is impossible—and best of all when the disease is primary and limited to the fundus, there is no question that operation is desirable ; but where the disease has advanced beyond these limits it is useless, and worse than useless, to attempt any operative interference whatever ; and under such circumstances, in my humble opinion, the patient is best to be left alone, to die in euthanasia through opium.

The prognosis in surgical interference in cancer is a purely anatomical one.

(1) In an organ such as the bladder, which is essential to the economy, only palliation, and that to a limited degree, is possible.

(2) I take it that it is an axiom recognised in surgery that in dealing with cancer the chain of glands nearest the affected part must be cleared away. Where the lymphatics and glands, as in a case of mammary cancer, can be completely cleared out, and no operation on the mammæ can be considered complete without this—even in cancer of the lip, the old V-shaped incision is not enough, the submaxillary glands must be removed as well—the prognosis for operation is excellent. But in the mamma only 40 per cent. even then offer so-called permanent cure in the breast, though recurrence may occur after three years somewhere else. For it must ever be kept in view that infiltrated glands do not require to be seen or felt. They may show no suspicious appearances whatever, even when microscopic examination will show them to be the seat of infiltration.

This is the initial difficulty in dealing with the uterus. To this all operators are now turning their attention, for even in early cases the glands are often affected. The two desiderata in dealing with a cancerous uterus are first, and mainly, early recognition and the possibility of dealing thoroughly and efficiently with the glands and lymphatics. As yet no very satisfactory method of accomplishing this has been devised either by the abdominal or vaginal route. It is most remarkable, speaking entirely from experience as gynæcologist to a large hospital, how very few cases present themselves in such a condition as to offer even the remotest hope of successful removal. Personally the great majority of cases in which I have thought it worth while to perform the operation have been in private practice. The uterus and adnexa, unlike the bladder, not being essential to the life of the patient, might be successfully dealt with in malignant disease were it not for the question of the glands and lymphatics.

Hitherto hysterectomy for cancer has not been by any means a brilliant success so far as the ultimate issue of the case is concerned, for the reasons I have just mentioned, viz., early recognition, removal of lymphatics and glands. This is certain, that while some are relieved, and some may enjoy a considerable period of immunity, it is never possible to promise a cure in any individual case. I am well aware that this opinion has been traversed, but I will only say this, that I can point to cases now that have been diagnosed microscopically as uterine cancer and been left alone, who have lived beyond the usual term of cancerous patients, three four years, one five years, and who have performed their duties more or less satisfactorily during that time, and died comparatively easy deaths; whereas I can point to others on whom operative interference was had recourse to who have died shortly, say within a year, afterwards from peritoneal cancer. Nothing can exceed the beautiful technique of Kelly, Segond, and Doyen, but even Segond, who

was amongst the originators of vaginal hysterectomy, has arrived at a very similar opinion. In suitable cases we must go on operating until we succeed, but in those cases which are advanced, and which statistics have shown us that operations do not prolong life or lessen suffering, surgical interference should be absolutely withheld. What the future holds in store for us with regard to the treatment of cancer none of us can say, but so far as our knowledge at present goes, surgical interference, except in the earliest and most favourable cases, is unavailing. It is needless for us to compare mammary cancer with uterine. The two conditions have nothing in common. Mammary cancer can be, and usually is, recognised early, and the statistics give the most satisfactory results ; but uterine cancer is unfortunately very different ; pains and hæmorrhages and discharges, go on for long before the patient seeks advice, and the most of them, therefore, when they come under the charge of the gynæcologist, are too far advanced to offer the chance to which I have just alluded.

For the present the surgical treatment of uterine cancer, unless under the most exceptional circumstances to which I have referred, is, to say the least of it, unsatisfactory, and, perhaps, great though the advances and achievements of surgery have been, it is possibly very much more likely that the great advances will not be surgical but medical, and that this hitherto unconquered foe will fall vanquished by means devised to produce the death and destruction of a bacillus. Until that time arrives vaginal hysterectomy must be persevered with in some of its many modifications.

But, gentlemen, enough of gynæcology. A society like this one is of immense benefit to the profession, not only because it advances the science and art of gynæcology, but because its aims are ethical as well. Here men learn to know their contemporaries, to estimate their value, appreciate their worth, and respect their power. Men come to see that they cannot do without each other, and that their

equals may be the greatest of their teachers. Men learn in such association with their fellows to love truth above all things, and others more than themselves, and thus to rise above jealousy of and detraction from one another. In such societies, if rightly used and properly taken advantage of, you may learn how small and insignificant you are compared with the progress of knowledge; and if you have learned aright, you may further learn in such association never to be jealous of success when it has been fairly and honestly earned, or to be embittered in your own minds because another has anticipated success in life or knowledge, and grasped a prize you yourself could not overtake. This is a lesson we have all got to learn, and the earlier we learn it the better for ourselves. It is simply the lesson of the truest charity which seeks not her own, and knows how to look not merely on her own things, but also on the things of others. Perhaps our own profession has earned for itself the opprobium of the *odium medicum*. Perhaps this *odium medicum* is a much misconstrued truth, and I am not sure that it applies to our own profession any more than to the profession of the Church or the Law. I think, perhaps, if I were to tell the absolute truth, it applies just as much to the Church as it does to us. But be that as it may, this I do know, that if anything will soften the spirit of rivalry, or lessen the friction of that which is too apt to accompany the struggle for professional preferment, it is the training which societies such as this which you represent this afternoon are so eminently fitted to give, the healthful influence of learning to associate with one another in a kindly, courteous manner, though differing, perhaps, *toto mundo* in thought and practice. The search for truth ought to be the paramount and ultimate object of us all. We must all learn to love truth and one another only the more sincerely as we reach truth and aid in apprehending and diffusing it. A right use of such a society ought to bear much valuable fruit in the days that are yet to come. The interchange of thought

and the courteous and kindly fellowship which such a society fosters, as well as the friendly intercourse between old and young, between youthful enthusiasm and the serenity of old age, should teach us, if nothing else, at least the three reverences : reverence for that which is above us, our seniors in age, our superiors in thought, our teachers, whether divine or secular ; reverence for our equals, our contemporaries, our fellow-workers, our competitors in the race of life, being generous to them as we would like them to be generous to us, scorning to take mean advantage or speak a detracting word. Forget not, however, gentlemen, the third reverence : reverence for that which is below us, the less gifted, those who have had fewer advantages, those, it may be, who have misspent their time, or through their own fault have come to distress, and those who of necessity are our inferiors. This reverence for what is in a sense below us is the noblest of all reverences, as it is the highest attainment in culture, whether moral or intellectual, which you can reach. Alas ! how very few of us realise or even recognise in later life the ideals of youth. Those who ever do must subordinate self, and strive for that which enobles and uplifts others. In working for others and human welfare generally, the highest energies of the soul may be employed without waste and loss of power.

And after all this ought to be, as I believe it really is, our highest ambition. The ethical standpoint of a gynæcologist ought to be the highest, because women unreservedly and confidingly trust themselves to his hands to undergo anything he may suggest. It therefore should be with us, as I am sure it is, our earnest endeavour to make ourselves worthy of the trust and confidence which womankind place in us. In the adoption of our various methods of work, though some in our department be somewhat conservative, and others inclined to press rapidly on and risk much, yet the end we all aim at is one, and as the end is one, so plainly it is our duty and our privilege to take the best wherever we find it, and to hand down the torch to our successors—

Quasi cursores vitæ lampada tradunt. And notwithstanding failures and disappointments which must be the lot of us all, yet our watchword ought to be—

Yet do thy work, it shall succeed
In thine or in another day,
And if denied the victor's meed
Thou shalt not lack the toiler's pay.

Faith shares the future's promise ; Love's
Self-offering is a triumph won :
And each good thought or action moves
The dark world nearer to the Sun.

VALEDICTORY ADDRESS.

Gynæcology as a Speciality.

I think I may congratulate you upon the work which the Society has accomplished during the past year. And specially would I like to say that the specimens which have been shown and discussed have been exceedingly valuable and most instructive. I think there is more to be learnt from the careful discussion and exhibition of specimens than probably from the actual reading of papers. At the same time I think that the interests of the Society might be further enlarged by what I should call "clinical evenings." It is not, of course, possible to exhibit patients at our meetings so as to enhance—as the members of other medical societies can do—the value of their papers, but I think we might often set apart meetings for the discussion of purely clinical matters, meetings at which those of our Fellows who are engaged in general practice, and not only as operative gynæcologists, might take a prominent part. Although, as its name implies, the Society is a Society for specialists, yet its *personnel* includes a number of men who are not specialists. I think both for their sakes, and the sake of the specialists also, that papers on subjects of a less purely operative and scientific character than those generally brought before us might with advantage be introduced.

That specialism in medicine is needful, and that to specialising we owe a great advantage in medicine, there is no doubt. The need for specialism arises from the

vastness of the field of work which is opened to us. And this vastness of the field, this great increase of scientific knowledge, is largely due to the enormous changes that have taken place in our means of obtaining this knowledge.

No more interesting memoir has been published of late years than that of Sir James Paget. It is full of interest from beginning to end, but what most interested me in reference to our own department of medicine was the fact that Sir James Paget was, in his early days, as regards the rest of the scientific world, in a position of most "splendid isolation," for he tells us how exceedingly few, even of his teachers, had any knowledge of a foreign language, and how he—a first year's hospital pupil—was invited by men like Marshall Hall and Kernan to go to their private houses and translate to them some of Johannes Müller's works. And he relates how Stanley, then lecturing at St. Bartholomew's Hospital, not only on anatomy, but also on physiology, was indebted to this mere beginner for information about many of Müller's discoveries, which, as Paget aptly remarks, Stanley incorporated into his lectures, as one might now tell the latest and rarest telegraphic messages from some distant field of great research. You will see, therefore, that it was possible for Paget in his early days to be not only a physiologist and a pathologist, but also a surgeon. It is due entirely to extraordinary and almost unique powers of work that Paget stands out pre-eminently as the latest and most able representative of this old order, and also as the man whose genius enabled him to become the pioneer of the existing order of affairs; for though it was said of him by one so well qualified to give an opinion as Sir Richard Owen, that he might be the first physiologist in Europe, Paget, when, after his many weary years of waiting, he got really into private practice, gave up his physiological work altogether except in so far as indirectly, through pathology, it had a bearing on the practice of his surgery. But Paget

saw greater changes than this partial separation between scientific research and practical work, and he also was one of the first to recognise the field of specialism in surgery. For, long before he gave up operating, he tells us he had given up doing special operations, and that for the reason that whereas in his younger days he could frequently say with regard to his scientific reading that he "had read everything" bearing on the subject, he found in his later days, as science became more cosmopolitan, that no man could keep abreast of the advances in all departments.

This subdivision of surgery, beginning shortly after the middle of the last century, went to such an extreme that, in the century's closing decades, it seemed as if the old familiar general surgeon would almost become extinct. It was in this period of the multiplication of specialists that the gynæcologist arose, and now, when we are face to face with the fact that the multiplication of specialists has reached its limit, and that some classes of so-called specialists must return to the decimated ranks of the general surgeons, it would be well to consider some points in connection with this question as it affects our own department.

Gentlemen, whatever our future may be, whatever the future of the youngest branch of surgical science may be, or whatever place it may occupy in the sciences, one thing remains, that in its short lifetime it has made more substantial and remarkable progress than any other branch of surgery, and I think I may with perfect safety claim that our Society has played no inconsiderable part in this consummation, and I have only to recall the name of Tait and of others who are still with us, whose names are for ever associated with the advancement of the science, to make good this claim.

Now, gentlemen, how does the matter at present stand. The gynæcologist, little by little, is encroaching on the domain of the surgeon, and the surgeon is equally

rapidly encroaching on the domain of the gynæcologist. Where is this to end? If it is competent for a general surgeon to do hysterectomy, then I presume it is equally competent for a gynæcologist to do gastrostomy.

It seems in this general dispute somebody must yield —either the surgeon must absorb gynæcology once and for all, or the gynæcologist must become a general surgeon. Gentlemen, it is not so abroad, one of the best operators that I know is Ségond, and is Ségond not a general surgeon? Doyen undoubtedly began as a gynæcologist, but now no part of the human body—from the cranium to the sole of the foot—is beyond his interference. The same obtains among provincial surgeons in England, and perhaps I may be allowed to instance my friend Mr. Mayo Robson, and among many other Fellows of our society, I believe. Of course, obviously, where the general surgeon must inevitably find his difficulty in gynæcology pure and simple, is his necessarily meagre acquaintance with pregnancy and local examination, and therefore it must be obvious that the surgeon must, in many cases, fall back upon the obstetrician to have the knotty problem of pregnancy excluded. The want of this knowledge on the part of the operator has given rise to more mistakes within my own knowledge than I care to refer to.

In Edinburgh those who are in gynæcology are obstetricians as well. The Professor of Midwifery, who is *facile princeps* of operators north of the Tweed, not only is a consultant in obstetrics, but he practices obstetrics as well, and all his followers, of whom every specialist in Edinburgh is one, have followed his excellent example. We have all held our posts for longer or shorter times in the Maternity Hospital, and, therefore, practising as we do in Edinburgh both obstetrics and gynæcology, that difficulty, of course, does not arise.

I have heard it said that gynæcology, pure and simple, is not a field sufficiently large to support a gynæcological surgeon. Probably it is not, but associated with obstet-

rics, it is a sufficiently large speciality. Of course, I quite recognise that a man doing a large practice in obstetrics would find some difficulty in overtaking gynæcology as well, but then no consulting obstetrician ought to have a large midwifery practice.

What, then, is the outcome of the matter? By the very meaning of the word a gynæcologist means one who interferes with the organs that are the special property of women. I am not aware that the appendix, or the liver, or the kidney, or the stomach, are different in the one sex and the other, and I do not see, therefore, that they necessarily come under the domain of the gynæcologist at all. What belongs to him is the uterus and its appendages, and, indeed, the whole genito-urinary tract. That, combined with obstetrics, leaves a man ample room to specialise. On the other hand, if the old Latin proverb is true, *Nihil humanum a me alienum puto*, and if the whole abdomen is to be the field in which the gynæcologist is to work, then, gentlemen, it is clear that we must cease to be gynæcologists and become simply abdominal surgeons. But why only abdominal surgeons? Why not general surgeons?

I know perfectly well that in what I am saying I lay myself open to misconception, as, apparently, not appraising at its full value what the surgical gynæcologist has done, and what surgical gynæcology has gained as a separate branch. I am fully alive to that, but at the same time I should like to ask now, is gynæcology, having finally, as it were, become almost a perfected science, to be handed over to the general surgeon, or to remain a speciality? If it is to be handed over to the surgeon then there is nothing more to be said. If it is to remain as a speciality, I think it should be associated with obstetrics.

If the gynæcologist is to proceed from the uterus to the ovaries and the appendix, from the kidney and the gall-bladder to the stomach, I would like to know how much

surgery is to be left for the surgeon ? If, on the other hand, the surgeon is to proceed from the stomach until he has reached the perineum, I wonder how much gynæcology is left for the gynæcologist ? Therefore, I think the time is rapidly coming when gynæcology must do either one of two things : it must remain a speciality, and therefore more or less associated with obstetrics, or it must become an integral part of surgery. This is a question which seems to be a very pressing one, and requires some careful consideration.

Again, gentlemen, may I venture to draw your attention to the fact that there must be a certain amount of gynæcology which must remain medical and not surgical. To say nothing can be done for a woman except by a surgeon's knife is preposterous ; there is a medical gynæcology as well as a surgical. The trend of the present day is to ignore this to a great extent. How many diseases of women can be treated and benefited by climatic influences, by dieting, by medicines of various kinds ? The man who practises obstetrics may have, and ought to possess, a general knowledge of gynæcology, but he need not on that account be an operative gynæcologist. He may see scores of sick women and cure many without any operative interference whatever.

Personally, my own position is this : I practise obstetrics and gynæcology pure and simple, but when a case occurs in which the diagnosis is uncertain, and which may involve the removal of the kidney or appendix, I would, I think, associate myself with an ordinary surgeon, just as the surgeon often associates me with cases where the case is purely gynæcological.

To state examples. Not many weeks ago I removed a large ovarian tumour from a patient, and four weeks after she developed a femoral hernia. I had completed my part of the work, and therefore I handed this femoral hernia over to a colleague.

Some time ago a surgeon had a difficulty about an

appendicitis where it might involve the ovary, and he associated me with him in his operation.

Although I confess to have trespassed on the surgeons now and again, at the same time my own position is that I practise obstetrics and gynæcology pure and simple. I am willing to undertake anything in those two branches that may present itself to me.

My friend, Dr. Macnaughton-Jones—and there is no one to whom this Society owes more—regards the matter from another standpoint, which I can quite understand. He says, in his excellent book, "Practical Points in Gynæcology" (3rd Edition, p. 2): "Gynæcology as now practised covers in its operations a much larger field than would be included by the treatment of the pelvic organs alone. This widening of its sphere resulted as a natural consequence of the many abdominal complications met with in connection with pelvic diseases. Operations for the latter revealed errors in diagnosis which compelled the gynæcologist to deal with unforeseen conditions and complications that practically involved the entire surgery of the abdomen. Tumours of the spleen, morbid states, growths and displacements of the kidney, affections of the intestines complicating uterine tumours and adnexal disease, or unavoidable accidents to the bowel arising in the course of an operation, all necessitated immediate action on the part of the surgeon when the abdominal cavity was opened. Thus the surgery of the spleen, kidney and bowel, as well as of the generative organs, the rectum, the ureter and bladder, has of necessity to be included within the range of modern gynæcology."

If this statement is an accurate description of modern gynæcology, either actual or ideal, then we must reconsider our position very carefully. I must say at once, looking back over experiences—considerably over a thousand abdominal sections—I have not met with the complications that Dr. Macnaughton-Jones refers to, but I can quite understand, of course, that such can occur, and I therefore understand his position entirely.

If we adopt this position, it seems to me that we should range ourselves as a department of surgery pure and simple, and call ourselves, as Dr. Macnaughton-Jones suggests, abdominal surgeons; for if the gynæcologist is to operate on the spleen and kidney, &c., in women, then why not upon the same condition in the male abdomen? If we have become abdominal surgeons, alike for both sexes, we can scarcely claim the style and title of gynæcologists. If we countenance this aggression in our colleagues' domains, we shall be powerless to resist the incursion of the general surgeon into the female pelvis.

I am not venturing for one moment to criticise the position of any of my colleagues, but I wish to point out that I think our position in Edinburgh is a more reasonable one, because there each of us professes obstetrics and the diseases of women, nothing more and nothing less. Every one of my colleagues, with, I think, a single exception, practises midwifery as well as gynæcology, and to that, I think, no exception can be taken.

Mark me, gentlemen, we claim to be a gynæcological society, and, being so, I think there is no reason why general surgeons should not belong to our Society, but, at the same time, what I want to know, and what I think there should be a pronouncement of our Society upon, is: What is a specialist in gynæcology?

Gynæcology, of course, covers obstetrics, and I call a specialist in gynæcology one who practises nothing but midwifery and diseases of women; that and that alone. Of course it may be asserted with perfect propriety that the gynæcologist has now been absorbed by what we call the abdominal surgeon; if that is so, then, as a body of men, we have ceased to exist.

There are, therefore, three possibilities. First, obstetrics and gynæcology may be absolutely divorced; secondly, men may practise gynæcology so-called, operating upon and interfering only with the organs of reproduction; or, lastly, gynæcologists may become absorbed in the general

surgeons, specialising to a certain extent as abdominal surgeons.

Gentlemen, I venture to bring this question before you this evening that we may ventilate the subject, because it seems to me that the time has arrived when we should take up either one position or another. I do not venture to say which is the best one ; I only venture to bring before you the position which the school to which I belong has uniformly adopted.

I will be glad to hear what you think of it.

Hæmatemesis after Operation.

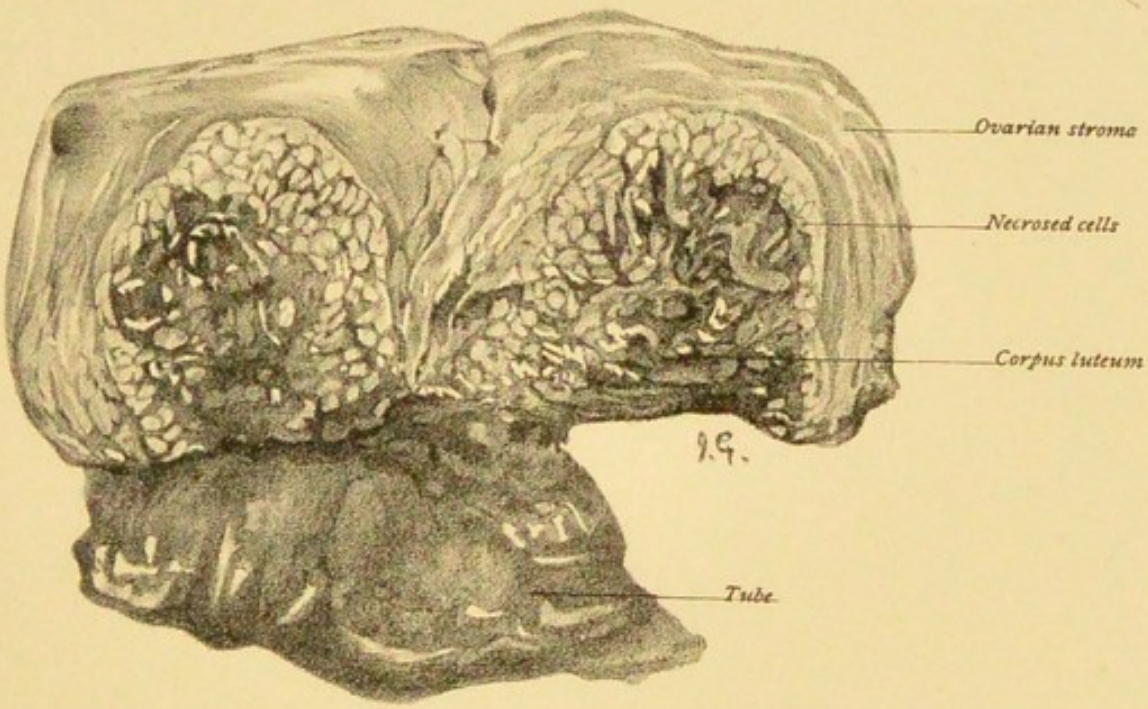
Dr. Halliday Croom read notes on a remarkable case of tubo-ovarian affection upon which he had recently operated. The history of the case was interesting owing to the unusual swinging temperature displayed. The patient was a married woman, aged 33, who had had two children. Her first labour and puerperium were quite normal. On July 22, 1901, her second child was born; on July 24 her temperature rose, and a regular well-marked sapræmia developed, with rigors and high temperature. This ran its course, and the patient was able to be up the last week of August. She was well till September 28, when she had a slight feverish attack (temperature 101·6°) which passed off in twenty-four hours. On October 3 she travelled to Scotland, and on the 5th had a second attack similar to the above (temperature 102°), passing in twenty-four hours. On October 12, a similar attack. October 17, there was a more serious attack (temperature 104°, pulse 144, distinct rigor), and from that day on patient remained in bed. I then saw her in consultation for the first time. On examination externally, there was a feeling of resistance to the left of mid line. *Per vaginam*, a polypus protruded from the os, and swelling could absolutely be felt on the broad ligament, to left of uterus, without exudation or fixation, but with localised tenderness and pulsation. On examination of the chest there were no pulmonary complications to be found. I advised operation, which was not agreed to, and recourse was had to douching, blisters over the seat of pain, and rest in bed. From October 18 to 24, the temperature was normal, it then

rose to 102·5° for a few hours; but from then up to November 4, highest temperature recorded was 100·6°. From this time on, however, till January 2, there was persistent evening rise between 6 and 8 o'clock, with the pulse seldom below 92°. From her confinement the patient had never menstruated. I saw her again in February, 1902, when I found the uterus slightly enlarged, in normal position. To the left of the uterus and slightly adherent to it was a mass about the size of an ordinary Mandarin orange, between which and the uterus there was a well-marked sulcus. The swelling was tender and its distal end movable; there was no exudation or fixation whatever, except at the edge of the uterine wall. Though, even under an anæsthetic, the diagnosis was a little obscure, I thought I had to deal with a pus tube; on subsequent operation I found this incorrect. A month later I was allowed to operate and found that there was no trace of a pyosalpinx, as I had expected, but a simple salpingitis. There was practically no fixation of the ovary and no exudation whatever, and the ovary and the tube were easily removed. The condition of the ovary, one which I have not hitherto seen, is illustrated in the accompanying plate, and is as follows: There is a well-marked corpus luteum; there is very little, if any, active inflammatory change in the ovary itself, but there are evidences of it in the small foci of necrotic cells and proliferation round them, and in places the inner surface of the convoluted lining of the Graafian follicle appears to be irregular and broken down. At parts in the tube there is nothing to be found but sub-acute inflammation. The connective tissue round about and in the folds is œdematous, and numerous infiltrating cells are to be seen in the tissue spaces. There are absolutely no pus cells and few multi-nuclear leucocytes of any kind. No organisms of any kind by any method of staining can be discovered, and the interest of the case lies in the fact that there is so little histologically to account for the marked symptoms.

The patient made an uninterrupted recovery, but there is one more feature to which I would like to specially direct your attention, viz., the presence of hæmatemesis. Except peritonitis, there is no symptom to be more dreaded than hæmatemesis. Personally, I have usually, though not always, found it the precursor of death, and whether it have a septic origin or not, it is, as a rule, associated with sepsis. In the present case, the hæmatemesis was peculiar. When the patient was put in the Trendelenberg position I was told that she was bleeding from the nose, and in spite of the head being raised this bleeding continued. After the operation hæmatemesis, at intervals of three or four hours, came on, and continued for twenty-four hours. There was increase of the pulse rate but no pyrexia. For twenty-four hours nothing was given by mouth, patient being nourished by nutrient enemata. On enquiry, I found the patient had suffered from hyperemesis gravidarium during her two pregnancies, and that during the two months she was confined to bed previous to her operation, her digestive system was very much upset.

Of course this symptom of hæmatemesis is not confined to abdominal cases, but has also been reported after operations for lithotomy and after operations in the rectum. In a number of cases where hæmatemesis occurred which I have taken from my note book, I find that eight out of ten died, and that the hæmatemesis continued from the end of the first forty-eight hours till death ensued. From my own cases I should be inclined to agree with the writer of a recent paper, who states that age has no influence on the incidence.

Many theories have been advanced. One is that it results from the administration of an anæsthetic, but considering the frequency with which anæsthetics are given and the comparative rarity of hæmatemesis, I think we may put this out of count. Again, it has been said that it is due to handling the stomach and duodenum,



SECTION THROUGH OVARY AND TUBE

but in most of the cases occurring in my own experience the stomach and duodenum have not been interfered with. The theory of von Eiselsberg is that it is due to thrombosis of the omental vessels after ligature or injury, followed by embolism in the wall of the stomach and the formation of ulcers.

So far as my personal experience is concerned I am disposed to think that most cases of hæmatemesis after abdominal operation are due to sepsis. Sepsis, we know, could produce congestion and small hæmorrhages in the mucous membrane, and whether sepsis be the actual cause or not, in my experience at least, the phenomenon was usually observed in cases which did ultimately succumb to sepsis in some form or other.

Whatever the cause, I have no hesitation in saying that in abdominal sections at least, hæmatemesis is one of the most serious complications which can occur.

On the Clinical Features and Post-Mortem Appearances of a Case of Deciduoma Malignum.

I VENTURE to bring this paper before you, not because I believe that I can add anything to the existing knowledge of the subject, but rather because I trust that I shall be able to illustrate some points in its clinical features and pathological aspect by a case that has come under my observation.

The subject of deciduoma malignum has already been discussed in the Society at length in consequence of a most valuable paper written by my friend and colleague, Dr. Haultain; and the views he propounded then seem gradually to have gained acceptance. Since the subject was first broached by Saenger, the literature has been gradually accumulating to a very large extent, yet in its secondary manifestations, and in the infrequency of its occurrence, there is still a wide field for further study. As to its exact nature—though the subject has been copiously discussed—it cannot be said that its pathology has yet been absolutely decided. The contention of one party, that it is a sarcoma, as held by teachers in the Metropolis here as well as in this Society, has been, I think, to a very great extent discarded; and I believe that by far the greater consensus of opinion is in favour of its being epitheliomatous, the result of a pregnancy, and originating from the coverings of the villi.

The cases which have been recorded present great similarity in their clinical features. There is generally,

in a patient of the age of 30 or thereby, the history of profuse bleedings following abortion or ordinary labour, and in 60 per cent. of cases following myxoma of the chorion, the hæmorrhage being succeeded by foul smelling discharges and the evacuation of masses of blood clot and shreddy tissue from the uterus. Metastatic deposits in the vagina, in the lungs, in the brain, &c., commonly lead to death in cases where prompt extirpation of the uterus is not had recourse to. There is very marked cachexia, and so rapid a progress of symptoms that the whole history of the case, from the first observation of any abnormal condition to the death of the patient from lung or other secondary complications, may not occupy a longer period than a few months or even weeks. There is, as a rule, no great difficulty in recognising the condition, and there is only one possible method of treatment, namely, early extirpation of the uterus. But where the difficulty arises is in relegating the disease to its true place in pathology, and here there are nearly as many theories advanced as there have been observers.

SAENGER believed the growth to be from decidua cells, hence his name for it—Deciduoma Malignum.

GOTTSCHALK advanced the hypothesis that malignant degeneration of the stroma of the chorionic villi produced the condition, which he named "Sarcoma chorio-cellulare."

FRAENKEL considered the sole origin of the tumour to be from the epithelium covering the villi, and that it was therefore a carcinoma.

GEBHARD believes the growth to be mixed carcinoma of maternal and fœtal structures.

MARCHAND, whose work on this subject is extremely valuable, advanced in 1895 a view which is still, I think, generally recognised to be the true one regarding the origin of the condition. Briefly, he holds that the tumour arises from both the kinds of tissue composing the epithelial layers of the villi, namely syncytium and Langhan's cells, which undergo a malignant degeneration and proliferation,

resulting, in the case of the syncytium, in the formation of large cells with large nuclei, polynucleated protoplasmic masses or giant cells, and multinucleated trabecular protoplasmic structures surrounded by blood spaces; while the Langhans' cells become polyhedral clear cells, smaller than the giant cells. He also believes that the metastases form by way of the blood-vessels, and that decidua cells take no part in the growth.

The three observers last named, thus appear to agree regarding the natural character of the growth as epithelial and differ merely upon the yet debatable ground of the origin of the syncytium from fœtal or maternal structure.

Marchand's teaching is entirely supported by the work of Haultain, whose views, which he very carefully and fully laid before this Society in 1899, are essentially the same as those held by the very latest writers on the subject. The difference of opinion between Marchand and the earlier observers probably arose from the fact that Marchand was the first observer to find villi in a case of this kind. The presence of villi was afterwards demonstrated by Haultain in a case which conclusively proved the origin of the proliferating cells to be from their epithelial covering. In the current number of the *American Journal of Obstetrics*, there is an elaborate and careful discussion of the whole subject by Dr. Pierce of Chicago, but his conclusions only confirm what we learned of the subject in 1899.

If its origin from the chorionic villi be accepted, deciduoma forms a unique growth of a parasitic nature and, necessarily, can only arise after pregnancy. So far, this cannot be contradicted, no case having yet been described without a previous pregnancy, which is not open to objection.

An interesting feature connected with the origin of the growth is the great frequency with which it follows myxoma of the chorion. This, however, is only to be expected when we remember that this so-called chorionic degenera-

tion is in reality due to an intense proliferation of villous epithelium. The mere fact of deciduoma being so often a sequela of vesicular mole is therefore one of the strongest proofs of its epithelial origin ; it is merely a maintenance of the usual epithelial proliferation found in that condition.

In the majority of cases the area of active growth is situated superficially in the uterine cavity and then forms a tumour which bulges into that cavity. On section, the growth presents the appearance of placental tissue, being mainly composed of blood clot, but on microscopic examination it shows the characteristic multinucleated granular masses and large nucleated cells derived from the syncytium and Langhans' layer of the villi respectively. If the area of origin be found, it will probably show chorionic villi whose epithelial coverings are in an intense state of proliferative activity.

The case to which I specially refer was as follows :—The patient was admitted to my ward in the Royal Infirmary, Edinburgh, on June 14, 1898. Her age was 44. She had had five children, the last in August, 1892. She had also had two miscarriages, one between the birth of the first and second child, and the last six years before her admission. Her menstruation had been quite regular every twenty-eight days, lasting six or seven. She had not menstruated since February, 1898, until the end of May, and was under the impression that her change in life had arrived, especially as her recent periods had been associated with more severe hæmorrhage than usual. There had been some intermenstrual leucorrhœa of an offensive character. She had observed a swelling of her lower abdomen, but she had only noticed it a few weeks before she came to the Infirmary. Except leucorrhœa, there was no discharge of any kind. She had complained from time to time, recently, of attacks of pain.

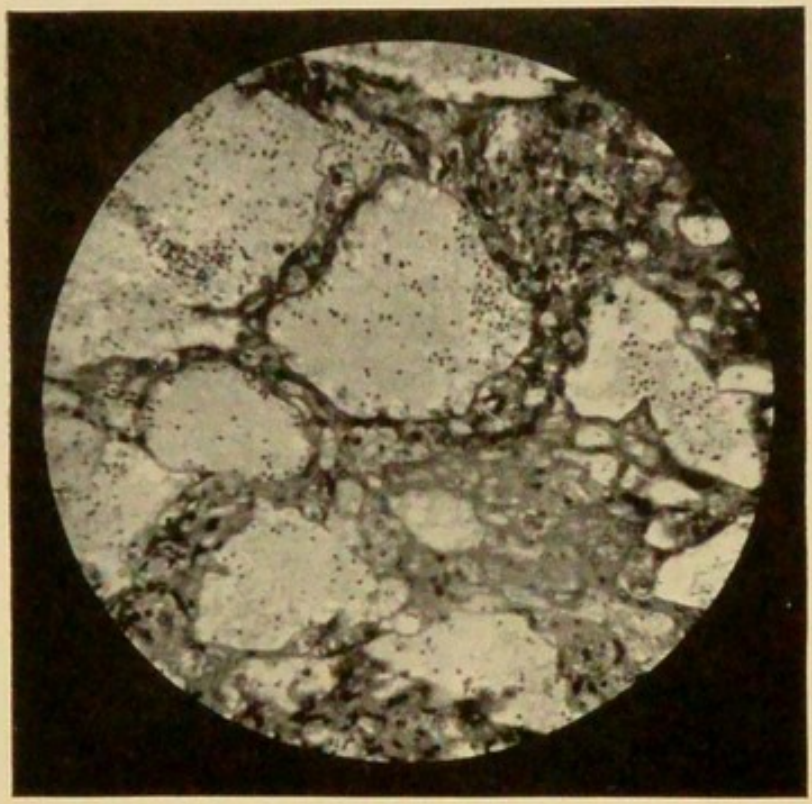
The woman was extremely emaciated, and on examination I found, stretching up to midway between the pubis and umbilicus, a tumour, hard, firm and consistent,

which, from the history and nature of the case, I took to be a rapidly growing sarcoma. I observed on the left labium a small tumour, about the size of a walnut, situated in the region of the Bartholin's gland on the left side. This I took to be an ordinary retention cyst in the Bartholinian duct, and, as it gave her considerable pain, opened it before doing anything to the larger tumour, and was surprised to find that it was not a Bartholinian cyst at all, but a solid mass, which could only be enucleated with difficulty, and was of a structure unknown to me. This very peculiar tissue was subjected to microscopic examination; and as it presented appearances similar to those of deciduoma malignum, I was led to alter my opinion with regard to the uterine tumour and determined to operate without delay. Unfortunately the patient sank very rapidly, lung complications having set in, and died before it was possible to do so.

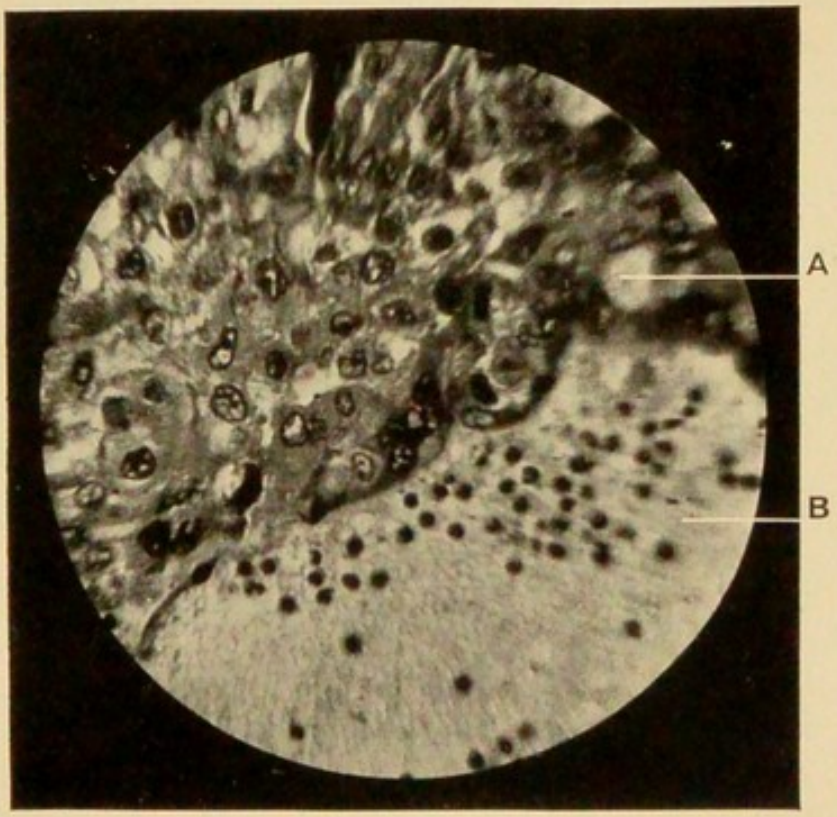
In its clinical history this case, you will perceive, is somewhat different from those already described. First of all, the patient was beyond the average age of women the subjects of deciduoma, for though these tumours have been met with between the limits of 17 and 55, the mean age of their occurrence is 33. This woman was 44.

As to the question of the age incidence: deciduoma may occur at any stage of a woman's reproductive life; in the cases collated by McKenna, the youngest was 17 and the oldest 54. Its occurrence is most frequent in the second decennium of the reproductive cycle. The figures fall off considerably both at the beginning and at the end of reproductive life. It is most instructive, therefore, to observe that these tumours develop just at that period of a woman's life when conception is most frequent, and this is just the very opposite of what we find in sarcoma, for sarcoma is comparatively rare under 35, and most common between 40 and 60. As has been very well remarked by McKenna, too much attention has, perhaps, been paid to the microscopic character of the tumour cells and too little to the age incidence of the tumour.

SECTION OF TUMOUR.



Low power, × 70.



High power, × 250.

A—Typical tumour cells (some dividing).
B—Fibrin, with blood cells.

Again, it must be noted that in this particular instance, the affection did not occur, as it usually does, immediately after pregnancy, the last recognised pregnancy having ended in abortion six years previously. This is a rather curious and interesting fact, for, in the recorded cases, it has been shown conclusively that this disease—deciduoma malignum, or by whatever name it is known—occurs in distinct relation to pregnancy, and very often in connection with a myxoma of the chorion. So far as I am aware, no case has been recorded in which the interval between pregnancy and the occurrence of the tumour has been so prolonged as in the one before us to-night. The rapid development of this tumour, six years after a recognised pregnancy, rendered the diagnosis of deciduoma malignum most unlikely, and it is difficult to see what relation there could be, if any, between the last recognised pregnancy and the development in the uterus of a tumour containing any of the elements of pregnancy whatever.

In the recorded cases the average time of the occurrence of one of these tumours after labour has been 6·9 weeks, after abortion 11·4 weeks, and after myxoma 10·0 weeks. In two instances only, so far as my knowledge goes, has there been anything approaching to so long an interval between pregnancy and the growth of the deciduoma malignum as in my case; these were the cases recorded by Hollmann and Löhlein, and both occurred after mxyoma. In Hollmann's case, there was four years' interval and in Löhlein's case, two years' interval. As McKenna has pointed out, if these were true cases of syncytium malignum, there must either have been some interrupted and unsuspected gestation between the time when the hydatid mole was expelled and that when the malignant neoplasm was observed; or remnants of myxoma must be capable of setting up malignant processes after a very long period of latency.

It must be noted that in my case the last recognised pregnancy, six years previously, was not a myxoma but

an ordinary miscarriage. I admit that it is very difficult to see how the products of pregnancy could have remained so long latent and then have ultimately become active and developed this tumour. The only alternative left is to suppose that the sudden amenorrhœa in February was the result of conception, although one would have expected, as is usual in such cases, a hæmorrhage and an attempt at abortion, and no such symptom appeared. It is the fact that in the uterus no signs of pregnancy beyond the characteristic cells of the deciduoma malignum were found.

A further point which seems to me of extreme interest in this case is that, from the commencement of her amenorrhœa until the day she died, the patient had no hæmorrhage whatever. Now, so far as my reading goes, hæmorrhage has been the characteristic feature and the first symptom in almost every case of deciduoma malignum, beginning, sometimes as soon as six weeks, and sometimes as late as two years, after delivery, the usual period being about six weeks. I have found no cases of this kind unassociated with hæmorrhage, except two.

Saenger's case was somewhat exceptional in this way. There was hæmorrhage so long as the abortion preceding the tumour was incomplete, but after the development of the tumour there never was any during its subsequent growth. In a case recorded by Bruce also, there was a similar absence of hæmorrhage. But as a rule almost without exception, hæmorrhage is a characterisitc feature, and the hæmorrhages are usually profuse, resembling those floodings which accompany abortion. They are also, as a rule, intermittent, but so abundant and frequent as to cause profound anæmia. In my own case, though there never was a trace of hæmorrhage of any kind, the patient was profoundly anæmic and cachectic.

The only discharge which was at all characteristic of deciduoma malignum was a bad smelling leucorrhœa, which was rather of a watery nature, suggesting rather an ordinary malignant disease of the uterus than deciduoma malignum.

The passing of a sound showed the cavity of the uterus to be enlarged, and the sound felt as if it touched friable matter ; on its removal, however, there was only the very slightest discharge of blood.

The short duration of the illness was quite in keeping with the character of the disease, because from the menstrual cessation in February, which was obviously the starting point of the illness, till her death in June, was only six months, and this is not an unusual duration for the disease.

Metastatic deposits in the labia have of course been already described in other recorded cases.

As to Diagnosis and Treatment.—Should the seat of origin be superficial, early symptoms of profuse hæmorrhage following the expulsion of the ovum will be present and thus closely simulate an ordinary imperfect abortion. From the early disintegration of the new growth a sanious discharge soon appears, followed by extreme cachexia, from the absorption of the toxines of decomposition, and, in default of timely operation, the patient rapidly succumbs from exhaustion, should she not already have become a victim to metastases in the lungs, brain, or indeed any of the vital organs.

Unfortunately in a small number of cases the primary area of active growth is deep in the uterine wall where a malignant proliferating villus has travelled ; indeed sometimes the apparently initial growth may be found outside of the uterus, as in the vagina, ovary or other organ, owing to the migration of such a proliferating villus. In these cases the symptoms of uterine hæmorrhage are naturally absent, and the first indication of the disease may be due to metastatic foci in the lung or brain. In this latter type of case early diagnosis is impossible, and in many instances the truth is first known on the *post-mortem* table.

When, as in the majority of instances, uterine hæmorrhage is present, an early diagnosis can be made. The disease should be suspected if bleeding follow the expul-

sion of a vesicular mole, or return after curettage for imperfect expulsion of the ovum. In these instances the uterine cavity should be thoroughly explored by the finger, and scrapings carefully examined microscopically.

When scrapings from a simple curettage are examined after the expulsion of a vesicular mole, the mere presence of masses of multinucleated trabecular and solid protoplasm with chorionic villi cannot be considered a sufficient indication of the presence of the disease so as to warrant vaginal hysterectomy, as such appearances may be present from the retention of normal vesicular villi. Should the disease be malignant, the profuse character of the bleeding during the scraping of the uterus will form a far more valuable indication of the disease, and may be corroborated by the microscopic appearances presented.

From the intense malignancy of the disease, early detection is most essential for a possibility of cure. It cannot be too strongly stated that repeated curettings without digital examination of the uterine cavity after imperfect abortion are to be avoided; at the same time, it is well to make it a rule to have all scrapings removed from a bleeding uterine cavity examined microscopically. The ease with which an expert opinion can now be got leaves no extenuating circumstances, should the disease be only diagnosed after months of hæmorrhage and when any hope of cure is out of the question.

In illustration of the case the President showed the following specimens :—

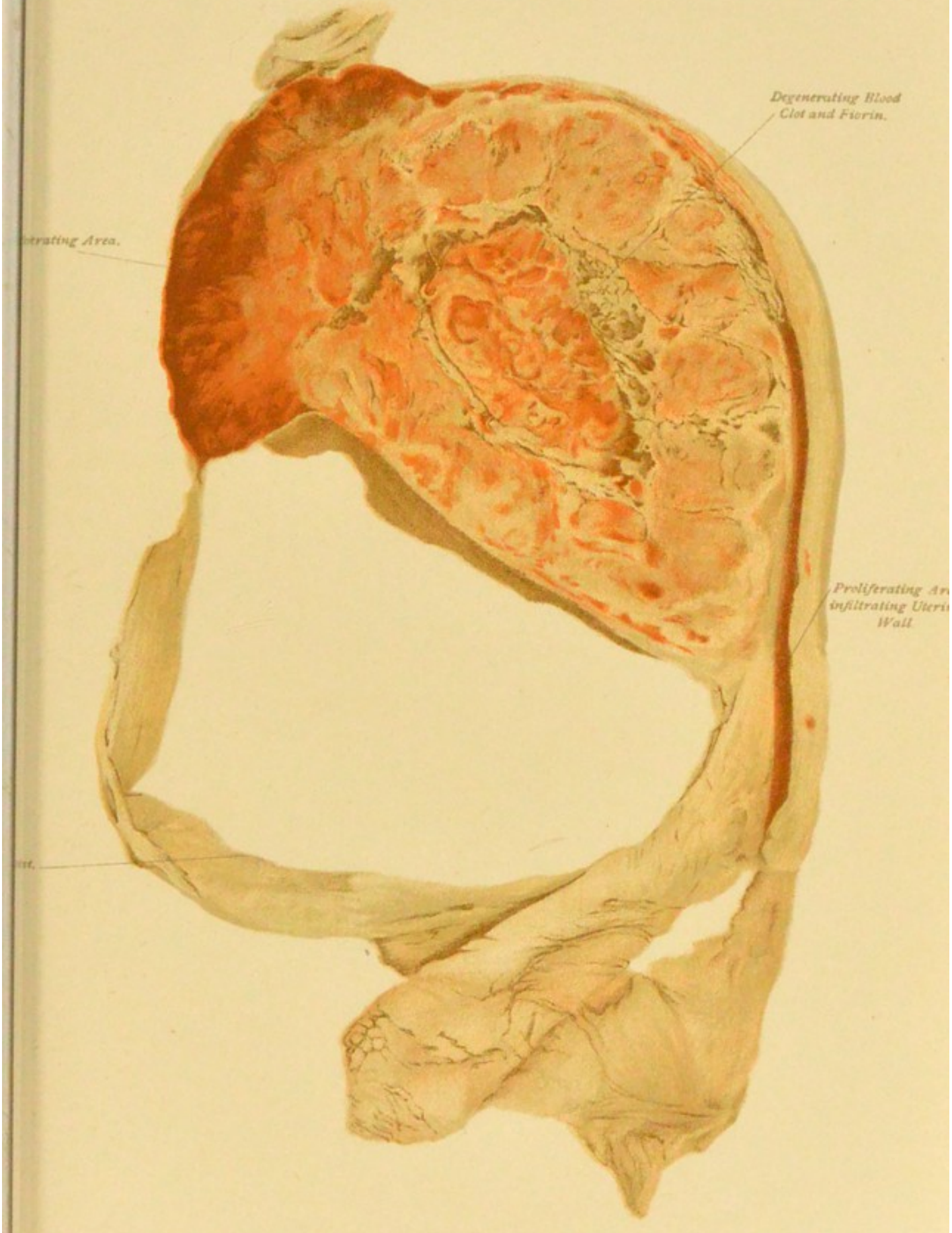
(1) Half the tumour, showing uterus, cyst and deciduoma.

(2) Portion of the lung with secondary deposit.

(3) Section of the tumour mounted on glass.

(4) Section of the lung with large metastatic deposit.

(5) A similar section with several smaller deposits, and the following microscopic slides :—(i.) Characteristic cells in the area of active growth of the tumour; (ii.) Centre of the tumour with mass of fibrin; (iii.) Section from nodule on the uterus, with actively proliferating cells; (iv.) Section from secondary deposit in the vagina.



SECTION OF TUMOUR, INCLUDING CYST.

SECTION OF TUMOUR.

SECTION THROUGH LUNG, SHOWING METASTATIC DEPOSITS.

Waterston & Sons, Lith. Edin.

Post-Mortem Report of the Case.

By Dr. Welsh, Pathologist, Royal Infirmary.

[The report of the autopsy is given in detail, but the condition of the pelvis and the mass removed from it has, for convenience, been placed first.]

Abdomen.—There was no ascites and no evidence of any acute peritonitis; only chronic adhesions in certain places. The anterior abdominal wall, from a point about 2 in. below umbilicus downwards to pubis, was firmly adherent to a large nodular tumour mass growing up from the pelvis. To this mass also coils of ileum were firmly adherent in two places, one near middle line, and the other towards the left margin of tumour. There were practically no adhesions between the tumour mass and any structures behind it, for the rectum passed down quite freely to the anus, and the ovary on each side was lying quite free. The pouch of Douglas was intact.

Pelvis.—The pelvis was completely occupied by a large nodular mass which passed upwards into the abdominal cavity, to within two inches of umbilicus in middle line, and rather higher on the left side than on the right. The upper surface of this mass was thrown into large irregular nodules of uniform soft consistence, and apparently composed of necrotic tumour tissue and recent hæmorrhage. The posterior surface was comparatively smooth and non-adherent, and the rectum and ovaries were lying quite free behind it; laterally it reached out to both sides of pelvis, to which it was firmly adherent. Anteriorly the bladder was healthy, empty, and adherent to the front of the mass. Extending above the bladder and between it and the uterus there was a large cyst filled with fluid. The tumour proper was infiltrating and expanding the fundus of the uterus.

The weight of this mass, 7 lb. 7 oz.; the maximum vertical length, 10½ in.; maximum transverse breadth, 9 in.

On removing the mass a small soft hæmorrhagic nodule, about 1 in. in diameter, was found on the left side of the upper vaginal wall.

The mass removed consisted of three portions formed by the bladder, the uterus with the tumour, and a cyst lying between the other two. (1) The bladder was completely adherent to, and was stretched up over the front

of the cystic portion posterior to it. The length from urethra to the summit was 5 in.

(2) The cystic portion lay between the bladder which formed its anterior wall, and the tumour and uterus which formed its posterior wall. The cyst was completed above by a thick membranous structure 3¼ in. long, which bridged the space between the front and upper part of the tumour and the upper end of the bladder.

The lower portion of the posterior wall of the cyst was formed by the anterior aspect of the cervix. Its lowest point lay exactly at the os externum, but separated from the anterior vaginal fornix by the bladder. The general site of the cyst was in the pouch of Retzius, or in the cellular tissue between bladder and cervix with peritoneum as its roof. Its walls were composed of a thin white tough membrane, which, where the bladder was contiguous to it, could be separated off the bladder wall, there being a little loose cellular tissue joining them together. At the upper portion the reddish purple structure of the tumour could be seen shining through the posterior wall. The lower part of this wall lying in front of the cervix (see *ante*) was free of tumour formation. There were one or two hæmorrhages into wall of cyst, which contained a bloody serous fluid under considerable tension, as it spurted out on incision. The length of the cyst from its upper end (the bridge of membrane 3¼ in. long) to lower end (at level of external os) was 6 in., its breadth (from tumour posteriorly to bladder in front) 3¼ in.

(3) Uterus and tumour: the cervix, unaffected by the deciduoma malignum, was 2 in. in length. The body of the uterus measured 6 in. from external os to the summit of the tumour, 4 in. from back to front, and 4¾ in. from side to side. The cavity of the body, 3½ in. in length, did not extend nearly to the summit; its antero-posterior breadth was ¼ in.; the posterior wall was ⅝ in. thick and 3½ in. long. The new formation affected the anterior wall and fundus. Its shape was irregularly pyriform, its consistence firm, its length 6 in., its breadth 4 in.; it extended from internal os to the summit of the whole uterine mass, and at the summit was adherent to the small intestine. Behind and to the left were the left ovary and tube, situated on a short pedicle of broad ligament 1¾ in. from the middle line of the uterus posteriorly. The rest of the broad liga-

ment was taken up by the tumour. On the extreme left the tumour was adherent to the descending colon. Anteriorly and to the left of the middle line the tumour was hummocky, and showed reddish purple hæmorrhagic areas. On section it was firm, brittle, and showed in its centre a limited spherical portion 1½ in. in diameter, separated by a trench from the rest and apparently necrotic. Elsewhere the structure of the growth was red and spongy, hæmorrhagic looking.

The remainder of the report was as follows :—

The body exhibited considerable emaciation ; rigidity in lower limbs only. The abdominal tumour was especially prominent below umbilicus ; walls loose and flacid. P.M. discoloration.

Thorax.—The pericardium contained about 5 oz. of serous fluid. No evidence of inflammation or new growth.

Pleuræ.—No apparent change in the pleura on either side. The left contained 35 oz. of deeply, and the right about 2 oz. of slightly, blood-stained fluid.

Heart.—Weight 9½ oz. Chambers of right side occupied by *ante-mortem* clot.

Valves.—Arterial valves competent. Pulmonary, 0·1 ; aortic, 0·9 ; mitral, 1·25 ; 1·45. Slight chronic thickening along the attachment of the aortic segments ; the other valves healthy ; some patches of fatty degeneration, and slight atheroma of the aorta.

Left Ventricle.—Slightly dilated. Walls thin, muscle warped, flabby and showed some anæmia and fatty changes. There were several minute foci of recent hæmorrhages grouped together just beneath endocardium on posterior surface of left ventricle near the auriculo-ventricular groove.

Other chambers practically normal.

Left Lung.—2 lb. 7 oz. Very adherent along its posterior border. Greatly collapsed and compressed up against the root. The very irregular surface showed numerous nodules projecting and raised above general surface. The nodules varied in size up to 2 in. in diameter, and were covered externally by a thin reticulated layer of fibrin, which had a bright red colour from dilated vessels and hæmorrhages just beneath it. On section, many large nodules were found in lung substance, but the greatest mass was towards root of lower lobe, where several appeared to have run together. The upper lobe was greatly collapsed

between the pressure of fluid in pleura and this mass of new growth at root of lower lobe. In section the nodules were of uniform and somewhat soft consistence, mottled pink colour with irregular patches of hæmorrhages and very largely necrotic.

Right Lung.—1 lb. 13 oz. No adhesions. Also showed nodules of similar character, more numerous, but smaller, the largest only about 1 in. in diameter, much less elevated above surface and less depressed in centre, each covered with thin layer of fibrin which was only slightly reddened. On section many similar nodules throughout the lung tissue, which was anæmic and collapsed, but to less extent than the left lung.

Liver.—4 lb. 11 oz. The gall bladder contained dark orange bile, no calculi ; biliary passages quite healthy. On section, the liver tissue showed some venous congestion, but no evidence of any malignant disease.

Spleen.—7 oz. Very pale, soft and diffluent ; no sign of new growth.

Kidneys.—Left 8 oz., right 6 oz. Both very anæmic with fatty changes in the tubules of the cortex. The left, in addition, showed a few hæmorrhagic nodular and wedge-shaped areas in superficial cortex, very ill-defined and indefinite, probably early infarcti due to emboli from the new growth. Some of these found in right kidney.

Stomach, Intestines and Rectum.—Showed no gross lesion apart from adhesions above noted, and also a small diverticulum about 2 in. long in ileum about $4\frac{1}{2}$ ft. from ileo-cæcal valve.

Brain.—3 lb. 1 oz. There was a small soft nodule about $\frac{1}{4}$ in. in diameter, superficially and extending about $\frac{3}{16}$ in. into cerebral cortex occupying the middle mater on its inner surface showed an area of similar superficial extent, covered by a thin layer of hæmorrhage and softened tissue. About an inch or more behind this there were several small hæmorrhagic points on inner surface of dura, but though the whole encephalon was carefully cut up no other gross lesion was detected.