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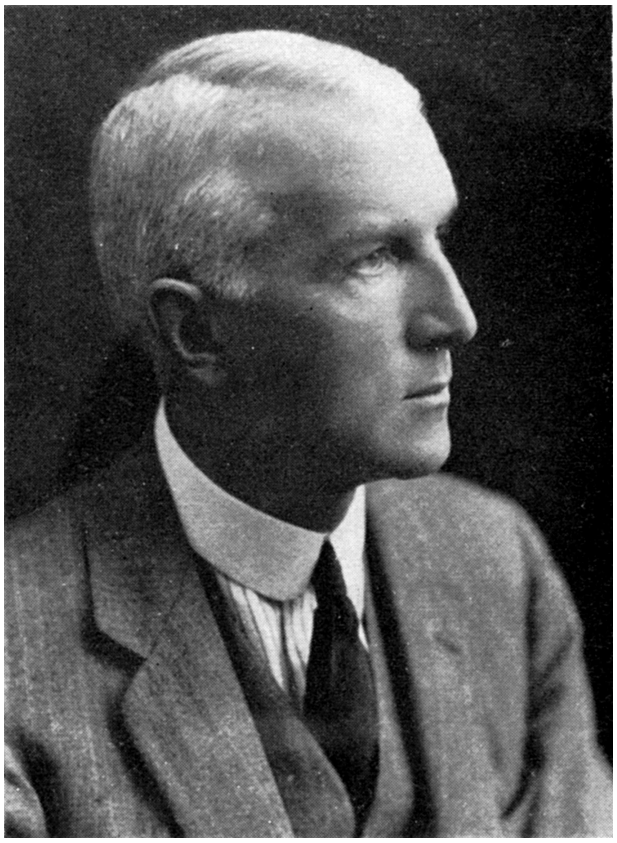
SOME ASPECTS OF PAIN
IN GYNECOLOGICAL PRACTICE.

Since the opening of our last Session the Society has lost four of its members by death, and it is, I am sure, your wish that in accordance with custom I should begin by saying a few words in memory of them.

Let me commence with one who was both the father of the profession in Ulster, and the oldest fellow of our Society. Dr. Brice Smyth became a member of this Society in 1861, long before the majority of us were born. He had commenced the study of medicine before the Medical Act was passed, and his name must have been among the first to be enrolled on the Medical Register as we know it. Up till within a month or two of his death he was in the habit of paying periodical visits to a few of his old patients, so that his term of active professional work extended to well over sixty years. He was at one time physician to the Union Infirmary, but he will be longest remembered through his close connection, extending over many years, with the Belfast Maternity Hospital. To the minds of a whole generation 'Brice Smyth' and 'the Maternity' were synonymous terms, and the number of medical men who owed to him their first introduction to practical midwifery must run to several hundreds. Gifted with robust common sense, a strong sense of humour, and a most kindly wit, Dr. Brice Smyth was a perfect example of a type of practitioner which can never become superfluous or out-of-date. Graduating, as he did, from a school in which the bacteriologist, the radiologist, and the biochemist were alike undreamt of, and where no *deus ex machina* was present in the shape of an abdominal surgeon or vaccinist, he was accustomed to rely for his diagnosis on the evidence of his own trained senses, and for his treatment his own educated mother wit. Such methods may miss refinement of modern diagnosis, but they ensure that the physician shall never lose sight of the patient in the disease, and it was in treating the patient that Brice Smyth excelled. Of his work in obstetrics I can say little from personal knowledge, as he had ceased



to practise that branch before I became connected with the Maternity Hospital, but it is common knowledge that he long enjoyed one of the most important midwifery practices in the city and the neighbourhood, and that his clinical teaching was much relished for its strong practical bent by the students under his care. Even up to the end he never failed to follow with interest and appreciation those recent advances in obstetrics which have been made possible and justifiable by improvement in technique and by scientific advance. His was a most charming personality, and those of us who knew him will not soon forget his cheery and genial manner, his pithy sayings, his fund of anecdotes – told usually at his own expense – and his wholehearted enjoyment of life. His three sons all followed their father into the ranks of our profession. Two of them predeceased him while still in their prime, and in the full tide of professional success. The third is happily still with us, an honoured physician and a fellow of our Society.

The news of Dr. St. George's death took everyone by surprise. Although we knew that he had passed his

jubilee in practice (he was qualified in 1871), no one could associate the idea of old age or decay with that bright, vivacious, energetic personality. It was fitting that his death should be sudden and immediate. He had been brought up at the feet of a great master. To almost all of us Thompson, of Lisburn, is merely the shadow of a name, but to his own day and generation he towered far above the common herd both in medicine and in surgery. It was as his assistant that Dr. St. George started in practice, and it was to his position as the visiting surgeon of the County Antrim Infirmary that he succeeded. This position Dr. St. George held till the day of his death, and he gave unsparingly of his time and of his talents for the benefit of that institution. Beloved and respected by his professional brethren, foremost in every philanthropic and social movement, and honoured by all who knew him, Dr. St. George led an ideal life and fell in harness.

Dr. Wilson, of Castleblayney, was practically a contemporary of Dr. St. George's, but the distance at which he lived from Belfast had prevented us from making his close personal acquaintance. His lifework was done in County Monaghan, and he has left behind him a reputation for faithful service and sound practice which any of us may well envy.

Since our last meeting we have lost Dr. Washington Tate, who joined the Society in 1905. Dr. Tate was a most lovable man, of singular personal charm. No one who met him in the round of his professional duties, socially, or in the field of sport would ever have guessed from his manner or his conversation that he was suffering from the most cruel blow that fate can deal to a young man in his prime – an incurable and a mortal disease; that sentence of death had already been passed upon him and was only awaiting execution. When the end came he met it without repining, and he has left to those who knew him the memory of a brave and useful life, and a shining example how death should be faced.

PAIN AS A SYMPTOM IN GYNECOLOGICAL PRACTICE.

To one like myself who has been engaged for most of his professional life in the study and practice of a speciality, the choice of a subject for an address to an audience composed in the main of general practitioners offers some little difficulty.

Subjects of great interest to specialists often have little to attract those outside their ranks. A discussion of technical details is always wearisome, not seldom futile, and often hard to be understood. Records of operative successes would carry more weight if they were compiled, not by the surgeon, but by the body of practitioners who see the patients afterwards. There is one subject, however, in which specialist, general practitioner, and in an even higher degree the patient take a deep and abiding interest. Pain is to the laity *the* symptom of disease, to the medical man it is by turns a guide to diagnosis, a will-o'-the-wisp to be neglected, and a galling reminder of unsuccessful treatment.

I have thought that it might be of interest to the members of this Society to review along with me some aspects of the problem of pain in gynecological cases. It is worth while to consider it, for it is the commonest symptom that we hear of and meet. Sometimes on that very account I am afraid that it gets less consideration than it deserves; it is the everyday complaints which are apt to miss close investigation, partly because their constant recurrence takes the keen edge off our curiosity, and partly because we are prone to assume that we know all about them, and can recognise our old friends at the first glance. Then, too, pain is such a variable symptom that one is apt to neglect it. Lesions to all appearance identical cause in one patient acute suffering and exquisite tenderness, while in another they produce no more than slight discomfort. Add what one might almost call the physiological vagaries of pain – its capacity for radiating from the affected nerve to others in the neighbourhood, even of making its appearance on the side of the body opposite to the lesion – and one can excuse the disgusted clinician who decides to disregard for all practical purposes such a vacillating and uncertain guide. And yet the more carefully one analyses pain and compares the symptom with the conditions actually demonstrated at operation, the more is one convinced not only that pain is in the main constant and fairly fixed in its manifestations, but that it is capable in many cases of affording more than a hint to the correct diagnosis.

Pain in the case of internal organs manifests itself of course as referred pain, felt by the patient in the skin area supplied by the spinal nerve or nerves which confer sensibility on the organ. I need not remind you that within this area we find constantly a maximum spot, in whose neighbourhood pain is most acutely felt, and where tenderness can be in most cases elicited.

Now let me very briefly recall to your minds the anatomical arrangement of the nerve supply to the internal female genitals, for in the investigation of pain in any given gynecological case that must be kept constantly before us.

The ovary is supplied by the tenth dorsal nerve, and the skin distribution of this nerve is over a zone corresponding fairly closely on the back and sides to

the interval between the last rib and the iliac crest, and running forwards with its upper border on a level with the umbilicus and its lower border two to three finger breadths above Poupart's ligament. Its maximum spot is of course the "ovarian spot," situated about midway between the umbilicus and the middle of Poupart's ligament.

The Fallopian tube is supplied by the eleventh dorsal, with a skin representation over a zone just below that of the tenth, covering the iliac crest and the lowest part of the abdominal wall. The maximum spot is situated just over the external inguinal ring.

The body of the uterus is supplied by the tenth, eleventh, and twelfth dorsal, and by the first lumbar nerves. The skin area supplied by the twelfth dorsal and first lumbar comes well down over the hip, great trochanter, and front of the thigh, with a maximum spot for the twelfth dorsal in the hollow on the side of the hip, and another just to the outer side of the femoral canal, and one for the first lumbar over the great trochanter, with a second on the inner side of the thigh. The cervix uteri is supplied by the second, third, and fourth sacral, which have a skin distribution over the back of the sacrum, the lower and inner part of the hip, and the back of the thigh. The maximum spot for the third sacral is over the fold of the nates, and that for the fourth over the back of the sacrum. These three nerves also supply the vagina, but this organ is endowed with tactile and heat sense, which is lacking in the other internal generative organs, and in regard to pain its behaviour is rather that of a skin area than of an internal organ. The sharp differentiation between the nerve supply to the body and to the cervix of the uterus is very interesting. The obstetrician will remember that during the early stages of labour pain is felt in front over the area supplied by the tenth and eleventh dorsal, less commonly over the distribution of the twelfth dorsal and first lumbar. When labour is in full progress and the os is called on to bear the full brunt of the attack, the pain "shifts to the back," to the area supplied by the fourth sacral.

For our present purpose it is not necessary to trace the course of these nerves to the organs which they supply, but it is important to bear in mind that the visceral branches to the genitals enter into close relations with each other in their course through the broad ligament, that connections are there established between nerves to separate organs which may well account for certain anomalies in the distribution of pain, and that in their course through the broad ligament they lie in immediate relation to the vessels and lymphatics, and are thus exposed to pressure, or even infection, in case of disease of these structures.

Ovarian Pain.

There is no diagnosis more easy to make or more difficult to get clear of than the diagnosis of "ovarian pain" or "neuralgia of the ovary," or "ovaritis," or more vaguely still, "something the matter with the ovary." Let a woman but complain of pain in her left side, and let her have the temerity to complain in spite of treatment, and it is long odds that before very long she will have learned from someone or other that it is her ovary that is the offending member. It will be well if it is not further suggested to pluck it out and cast it from her. The diagnosis is one that is satisfactory to the medical man, since it explains any and every therapeutic failure, and it more than satisfies the patient, who lives henceforward in resignation to her fate, knowing that she is distinguished among her sisters by the possession of a complaint at once interesting, almost incurable, and non-fatal. But are we to label as ovarian disease every case with intractable pain in the left side, with some doubtful tenderness over a rather vaguely defined ovarian spot, with perhaps even some menstrual disorder? I sincerely hope not. Both physically and mentally the ovary is a tender spot with most women. To their minds a diseased ovary is a standing threat to unsex them, an obstacle to a happy marriage and a bar to motherhood. Fears such as these, sufficient to poison and shadow the mind for years or for a lifetime, can be easily raised. They are not so easily laid. Not simply our firm diagnoses, but our most casual utterances, the mere obiter dicta of the consulting room, become fixed in the memories of patients, and of their friends, and recur as words of doom long after we have forgotten that we ever uttered them. It is a sound rule then, especially in the case of young and unmarried women, never to condemn the ovary upon the strongest presumptive evidence, but to withhold even a tentative diagnosis until a bimanual examination, if necessary under an anaesthetic, has been made. I have seen too often the relief of a woman on being assured that her fears of ovarian trouble were groundless, ever to raise such a suspicion without good reason.

Quite a number of conditions may give rise to pain in the region of the ovary without that organ being in any way affected. One often sees for instance a very colourable imitation of left ovarian pain caused by a chronic faecal accumulation in the sigmoid, and relieved by the administration of aloes. Then, again, a typical ovarian pain is so often the main complaint of young unmarried women suffering – as many of them

do – from cervical erosion, that I am in the habit of recommending students when they see a young woman with ovarian pain always to think first of her cervix. But one must sometimes look further afield. I had not long ago a girl in hospital with pain that might well have passed for ovarian, and with some frequency of micturition, another common symptom of erosion. An erosion was in fact discovered and removed, but her symptoms persisted, although examination of her pelvis while she was under the anaesthetic had revealed no further abnormality. A radiogram showed a stone in her ureter just above the pelvic brim, and when it was removed the pain disappeared. Experiences such as this tend to justify one in the attitude of refusing to diagnose pain as ovarian unless the ovary can be definitely felt to be abnormal. - But this, attitude again can be overdone, and I now give you an experience illustrating the other side of the picture. I saw once a young woman with persistent left- sided pain and tenderness over the ovarian spot, absolutely convinced that she was suffering from disease of her left ovary. It was not strange that her mind should be fixed on that organ, for her abdomen had been opened two years before, and a small cyst excised from the ovary without, however, relieving the pain. She was very nervous and hysterical, the history of the previous operation seemed to put the ovary out of court, examination under an anaesthetic revealed no tumour or displacement, so her doctor and I decided that the ovarian pain was a hysterical girl's fancy, and proceeded to charm it away. We spent six months without finding any charm that had even the slightest effect, and I then, though much against the grain, reopened her abdomen. I found a normal ovary with a short stout adhesion binding to it a loop of bowel. The band was divided, and the patient, who had spent most of the preceding two years in bed or on a sofa with a nurse in constant attendance, was transformed into a healthy and active member of society. Now that was just one of the cases where an absolutely typical pain would have proved itself not only a guide, but the only reliable guide to the diagnosis had our minds not been obsessed by a preconceived, and as it turned out an utterly false assumption.

It is interesting to note how many ovarian lesions are totally free from pain. The ovary may be crushed completely out of existence by the growth within it of a large cyst, and yet the patient may never have been conscious even of uneasiness. Solid tumours cause no pain until they become big enough to cause pressure on their surroundings. Even cancer is painless unless it has involved neighbouring organs. Every clinician has been able to demonstrate prolapsed ovaries innocent of offence. Every operator has seen ovaries honeycombed with small cysts which had never caused ovarian pain.

Undoubtedly, however, many cases of ovarian pain are due to the presence of small or medium sized cysts. The ovary will submit tamely to almost indefinite distension, provided it be gradual, but it resents a sudden increase in bulk, and I have noticed that many of the painful small cysts of the ovary are found on removal to contain recent blood, showing that hemorrhage with consequent increase of pressure had taken place. There is another type of painful cyst, not very common, which contains thick tarry blood, and is usually adherent to the surrounding parts. It has been shown recently by several observers that islets of endometrial tissue are to be found in the wall of such cysts, and are presumably the source of the hemorrhage. Then there are the cysts of the corpus luteum, which are in my experience invariably painful, and I shall have something to say immediately about another type of painful ovary which is often enlarged by the presence of medium sized or small cysts.

Any discussion of ovarian pain must, of course, take into consideration inflammations of the ovary or ovaritis. Up till quite recently this was one of the most abused terms in gynecology. It served as a cloak not merely for ignorance of the pathological, but for ignorance of the normal as well. It was responsible for many an unnecessary operation, and for the castration of many an unfortunate patient. Not that the disease is an uncommon one. Inflammation of the ovary, both of the surface of it and of its substance, is often met with clinically, is always painful, and in most cases requires operation for its relief. But the clinical types of the disease are definite, and produce changes in the organ recognisable in most cases by the finger, and in all cases by the eye.

There is first the acute suppurative type with the formation of an abscess either in the substance of the ovary or with the ovary as part of its wall. This form follows the upward extension of a purulent inflammation from the genital passages. It may be the sequel of a septic abortion or confinement, but it is much more common as a complication of gonorrhoeal infection, indeed in my experience it is quite as common a complication as the classical pyosalpinx.

Then there is a type of chronic inflammation, which one might call the congestive or oedematous form, in which the organ is enlarged, soft and watery, and tears very readily. It is very often present in cases of chronic cervical inflammation, and arises in all

probability from a minimal infection reaching the ovary by way of the broad ligament lymphatics. It is much more amenable to treatment than the other forms, and I have repeatedly seen enlarged tender and prolapsed ovaries restored to a comparatively healthy condition, and even to an approximately normal position after a routine course of treatment of the cervical infection. It is in this type of ovary that one very frequently finds cysts.

A third type might be called the perioophoritic type. In it the organ is bound down or even completely encased by firm fibrous adhesions, the result of an antecedent peritonitis. In many, if not the majority, of these cases, the original lesion has been tubercular peritonitis of childhood or adolescence, now completely cured. The ovarian pain from which these patients suffer comes on as a rule only at the time of the menstrual epoch, and is evidently caused by the resistance to the normal menstrual turgescence of the ovary.

I have never seen a case of metastatic inflammation of the ovary, but as far as one can judge from the literature it does occasionally occur.

Now all of these types of ovarian inflammation correspond to the pathological standard, they are tissue reactions to an irritant, an irritant which we can with more or less certainty identify, and whose place of origin and line of attack can be given with at least a high degree of probability. But when it comes to be a question of postulating the existence of a primary ovaritis, of unknown origin, and with all the organs in its neighbourhood healthy, to account for the existence of a particular type of pain, I for one dissent. I have never seen such an ovaritis, and I do not believe in its existence. It is sometimes said to have as its pathological signs the presence of small cysts and of fibrosis of the ovary. But, as has been remarked, it is the business of the ovary to form small cysts, and I would add that when these cysts rupture, as they do periodically, it is the business of the ovary to produce fibrous tissue in their place.

All of the conditions mentioned as causes of ovarian pain are likely to come to operation, and you will, I am sure, bear with me if I say that not only in common with all other gynecologists do I strongly deprecate the removal of both ovaries, but that except in cases of malignant disease it is in my experience very seldom necessary in order to get rid of the ovarian lesions. With care and patience a bit of healthy ovary can practically always be found and preserved in its natural attachment, and quite a small piece is sufficient to obviate the onset of a premature menopause. Much brilliant work has been done of late in the grafting of ovaries after double oophorectomy. I cannot but think that if the same care and skill had been displayed in the planning of the original operation the grafting would very seldom be necessary.

I have mentioned already that the skin representation of the internal genital organs is not fixed and constant, and that anomalies sometimes make their appearance. The phenomenon of transference to the opposite side from the lesion is of course common to most paired organs such as the ovaries. I have already pointed out that to cause pain at the ovarian spot is not the exclusive privilege of the ovary. I wish now to mention another anomaly, which I have observed in a few instances. An ovarian lesion sometimes causes pain in the distribution of the eleventh instead of the tenth dorsal nerve, and the tender spot is over the inguinal ring and not over the ovarian spot.

Uterine Pain.

Now I turn to another organ. The normal uterus is most insensitive. It suffers extensive lacerations, it undergoes wide displacements from its natural abode, it permits its tissues to be grotesquely distorted by enormous tumours or infiltrated and destroyed by malignant growths without ever giving its possessor a twinge. Yet any one of these conditions may be associated with very real pain.

One would like again to emphasise the fact that in many ways the uterine body and the cervix behave as distinct organs. It is a pathological truism that cancer of the cervix practically never invades the body, and vice versa. The sphincteric arrangement of the muscular fibres at the internal os Separates physiologically the uterine cavity from the cervical canal, and though the cervix is almost always infected in the course of a gonorrhoea, it is only in one case out of ten, at least, that the infection spreads to the endometrium of the body. The nerve supply of the body is distinct from that of the cervix. It registers pain on the lower part of the anterior abdominal wall and the front of the thighs, and that the pain is often due to painful contraction of the uterine muscle is shown by the frequency with which it is described as shooting or crampy. The cervix on the other hand registers over the sacrum, and the pain is dull and heavy, for there is here no question of muscular contractions. Not but that cervical lesions often set up painful uterine contractions by raising the sensitiveness of the muscular reflexes, much as an anal fissure sets up painful contractions of the sphincter. It is in this way for instance that a cervical erosion causes dysmenorrhoea.

Now let us consider one or two conditions causing uterine pain. Take retroversion. It may be discovered in the course of a routine examination giving rise apparently to no symptoms whatever. It is for instance the normal position of the uterus in the case of an ovarian cyst which has grown too big to be accommodated in the pelvis, and it is quite common in young women with a short under-developed vagina. Then one finds women with a painful tender retroverted uterus who under local treatment, or even without any treatment, lose their pain, and also in many cases their displacement. Again we meet patients with permanent painful retroversion whom nothing short of operation cures. What is the cause of the pain? For I think every honest clinical observer will admit that it is not caused by the mere position of the uterus.

Most of the painful retroversions that we see are in women who have borne children. To my mind there are two main reasons why they are painful.

The first is sepsis. I do not mean the acute form, but the chronic minimal infection. We are learning to recognise this as the cause of chronic myalgia, chronic fibrositis *et hoc genus omne* – what our fathers called rheumatism in short, and it might well be taken as the cause of one bugbear of abdominal surgery – the painful adhesion. I have long been convinced that the adhesions which must be present after every abdominal operation seldom persist, and still more seldom give rise to pain unless a chronic infection is present.

Now many cases of painful retroversion display prominently on the cervix the scars of the port of entry of infecting organisms. There is often evidence in the shape of an ectropion, a granular cervix or a cervical catarrh that the invasion is still going on. In many cases not only is there a constant infection to contend with, but there is also a subinvolution, for just as acute sepsis in a puerperal case delays normal involution, the chronic infection in these cases acts in the same way, and the bulky tender uterus is the result. These cases if treated in the routine manner for uterine infections often yield a most gratifying result. I used to wonder why such old wives' remedies as the swab, the tampon and the curette produced so much effect in cases of uterine pain. I now realise, thanks to Sir Almroth Wright, that you cannot draw blood in an infected area without giving the patient that most potent of all vaccines, one composed of her own living infecting organisms, and that you cannot produce a profuse vaginal discharge by a tampon without flushing the infected tissues with a copious flow of highly antiseptic lymph.

The second main cause of painful retroversion is to be found in a relaxation of the connective tissue supports of the uterus, in other words in commencing prolapse. Just as the integrity of the abdominal wall depends ordinarily on the fasciae, and under extraordinary strain on the muscular sheets, so the integrity of position of the uterus is maintained ordinarily by its connective tissue attachments, with the levator ani as a standby to resist sudden or excessive increase of the intra-abdominal pressure. When the fascial supports of the uterus have been weakened by childbirth or are congenitally ill-developed, the uterus, at once the least firmly secured organ in the pelvis, and the one most exposed to pressure comes to bear, not intermittently, but directly and continuously on the levator ani. When the uterus is in the normal anteverted position the broad ligaments must have the effect of distributing the downward pressure of the organ over practically the whole width of the muscular sheet of the levator ani. But when the fascial supports are relaxed and the uterus is also in retroversion, it presents at the genital opening of the levator like a wedge, it bears without intermission on a small area of muscle, and pain follows as the inevitable result. These are the cases with backache (for the levator is supplied by the 2nd, 3rd and 4th sacral) relieved by rest in bed, which takes off the pressure, and cured temporarily by the insertion of a pessary, which distributes it. They should all be operated on, as they tend to grow worse.

To my mind these are the two main causes of painful retroversion. When the uterus shows no sign of inflammation, when it is neither tender nor enlarged nor flabby, and when it is well poised in the middle of the pelvis above the pelvic floor, I do not think it matters much whether the fundus points to the back of the symphysis or to the hollow of the sacrum, and I look elsewhere for the cause of the pain of which the patient complains. I am particularly careful not to tell her that "her womb is out of place."

THE CERVIX.

The commonest cause of pain in gynecological cases is, in my experience, some form of cervical lesion – inflammation, ectropion or the like. J do not propose to go into them in detail, but there are one or two points worth noting.

And, first, the widespread distribution of the pain which a cervical lesion may cause. It may not only cause sacral pain, as it is entitled to do, it may cause painful contractions of the body of the uterus as has been already mentioned. Then again the lymphatics in the broad ligament may become infected, and

through their agency the ovary or even the nerve plexus may be affected so that a very extensive area of nerve distribution may ultimately become involved.

I should like also to say a word about the conical cervix. In my experience not only is it often associated with dysmenorrhoea, and a very intractable form of dysmenorrhoea at that, but if it is torn in parturition, and it is very liable to be torn, the laceration is likely to be an exceptionally painful one.

No discussion of painful affections of the uterus should be allowed to pass without some mention of cancer. It affords another opportunity of giving the lie to to the old fallacy, so hard to kill among the laity, that uterine cancer has pain as one of its symptoms. Certainly most women who die of it undergo months of martyrdom. But the disease so long as it is cancer of the uterus, indeed even after it has passed the boundaries of the uterus but is not yet absolutely hopeless, is quite free from pain. It is only in the final stages when there has been massive local extension, and especially when the pelvic glands have become transformed into large fixed blocks of cancerous tissue that pain becomes a prominent symptom. May I say a word on behalf of these hopeless cases. There are some medical men who hesitate to give them morphia for their pain. I prefer to give opium myself, but I think that if there ever is a clear indication for the free continuous administration of the drug, it is in the case of these doomed and suffering women.

There is just one other condition that I should like to say a word about, and that is extrauterine pregnancy. In passing I would remark how important an aid to correct diagnosis in the case of a tubal mole or a tubal abortion is the history which we so often get of sudden pain in the side as the starting point of the illness. But what I principally wish to speak of is the pain in the acute form of intraperitoneal rupture. Everyone who has seen a case knows how acute the pain is, far too acute and too continuous to be caused by the mere giving way of the tube. It is the pain of peritonism, and the peritoneal irritation is caused by the effused blood. I saw a patient once with a large effusion of blood giving a dull note above the pubes. She was removed to hospital for operation, and when I saw her again some two or three hours later she volunteered the information that the pain was easier, but was getting higher up. On examining I found that the line of dulness had also risen, and that at both examinations the limit of pain and the limit of effusion were practically identical. The practical point which I wish to make is that in all cases the effused blood fills Douglas' Pouch first, and that peritoneal irritation is present there from the beginning. On making vaginal examination of the cases of acute rupture which I have seen I have usually been able to detect blood clots, but I have always found extreme and most unusual tenderness in the posterior fornix. This is a symptom of very great importance, as it enables one to differentiate ruptured tubal pregnancy from other forms of acute abdomen. I mention it because I do not recollect seeing stress laid on it in the common descriptions of the condition. Some cases that I have seen would go to show that the intensity of the. pain diminishes fairly rapidly as time goes on. This is in all probability due to the secretion of peritoneal fluid in response to the irritation. The quantities of fluid which we see in a rupture of some hours standing contain, I have no doubt, a considerable percentage of peritoneal exudate. One point of interest to the surgeon arises. If it is the effused blood which causes such intense irritation in ruptured tubal pregnancy, may not some of the pains from which our patients suffer after abdominal operations be due to imperfect hemostasis?