

THE PROCLIVITY OF CIVILISED WOMAN
TO UTERINE DISPLACEMENTS:
THE ANTIDOTE

ALSO
OTHER CONTRIBUTIONS TO GYNÆCOLOGICAL
SURGERY

BY

M. U. O'SULLIVAN

L. ET L.M.R.C.S. ET R.C.P. ED., L.M. DUBLIN

Fellow British Gynæcological Society

Hon. Surgeon Women's Hospital, Melbourne

*Hon. Gynæcological Surgeon St. Vincent's Hospital,
Melbourne*

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PREFACE.

In presenting my views on the subject of Uterine Displacements, to the profession, I do so, chiefly with the desire of influencing the general practitioner, who has not been in a position to devote special attention to a class of affections of everyday occurrence, and in the hope that I may help to put a stop to their routine treatment by pessaries, and such other measures, as have been heretofore used, to the exclusion of all rational remedies.

I have ventured to publish a number of illustrative "abdominal" cases, taken promiscuously from practice, because I believe that their publication—giving technique of the various operations resorted to, their after-treatment, &c.—must have an educational effect, which any general treatment of the subjects dealt with, will fall far short of.

A few papers, read before the Medical Society are, as indicated, reprinted from the *Australian Medical Journal*.

THE PROCLIVITY OF CIVILISED WOMAN TO UTERINE DISPLACEMENTS.

THE ANTI-DOTE.

The much hackneyed subject of uterine displacements has constantly occupied the attention of the profession, and passed through many phases, since the days when Recamier and Lisfranc first accorded them a place in the long list of female ills. Previous to this, they were almost entirely unknown; the only uterine lesion of which we have any record being prolapse, which was, according to all early research, accounted the *bete noir* of woman's existence.

Velpeau made displacements the chief morbid factor in gynæcology, and this teaching was accepted until Gosselin championed metritis, as the only lesion worthy of serious notice. Authors seem to have blindly gone from one excess to another, until at length, in the light of more recent research, the darkness is dispelled. The science of gynæcology has now become more analytical; each disease is consigned to its proper place. The term uterine displacement, which in earlier times was so simple, and referred only to one pathological point, now comprehends complex elements, the consideration of which is of the first importance, with a view to successful treatment. All the nonsensical conflict of opinion that has marked the treatment of this question, more particularly during the past half century, is easily explained; if we consider the rigid and inflexible dogmatism of most teachers in asserting their own narrow views, and the many and varied factors from which those pathological deviations may arise; if we remember, with Mr. Halliday Croom, that there have been many authors who regarded displacements as entirely mechanical, and treated them accordingly; that others attributed them

solely to inflammatory action, and adapted their treatment to the cause; that there were still others who looked on them as altogether due to general enfeeblement and loss of tone; while there were many, perhaps very many, who regarded displacements as the chief etiological factor in chronic cases of disordered health in women, and treated them vigorously with all sorts of mechanical appliances.

It is extremely gratifying that, thanks mainly to the brilliant labours of such authors as Mr. Halliday Croom, Lawson Tait, Schultz, all the diversity of opinion, and thoughtless empiricism of the past, are now heard of no more.

Simple displacements would appear, at first sight, to be of comparatively little importance. Very many healthy, fertile women suffer from them without any subjective manifestations of their existence. All gynæcologists are familiar with the fact, that a woman may suffer from even the most extreme disorders of place, and yet not complain of the slightest inconvenience, and carry on her ordinary duties without any very marked symptoms of her abnormal condition.

I do not mean to convey, that those ordinary uncomplicated displacements are devoid of all pathological import, because it cannot be denied that they create, for the displaced organ, a strong tendency to morbidity, and, as the primary factor in many disorders of its function, nutrition and sensibility, they demand attention and treatment; but I do maintain that most gynæcologists— influenced perhaps by their own enthusiasm, and tempted by the hysteria, or what I may be allowed to designate the *furor operativus* of their patients; or in blind deference to the teaching of obsolete authority—are liable to exaggerate their seriousness, and make them the absolute cause, not only of all passing and trifling indispositions, but of all chronic invalidism in woman.

The effect of fifty years of this unworthy condition of things is plainly evidenced by the alarm and apprehension excited in the average female of to-day, by the commonplace but *solemn* verdict, "displacement of womb," as well as by the far-fetched and unwholesome methods of treatment adopted in such conditions. For, is it not a notorious fact, that the fashionable dislocation is, in all cases, treated by the reckless and indiscriminate use of pessaries, without any regard to the cause? And if further evidence was required in proof of my contention, it is to be found in the fact, well known to every practitioner of experience, that a woman will wear a pessary with satisfaction, and even pleasure to herself, although it may give rise to fresh pains, and intensify those already existing.

Before the student of gynæcology can hope to treat pathological deviations successfully, he must have—(1) a precise knowledge of the mechanism by which the uterus is retained in place; (2) a firm grasp of the general causation of all abnormal positions; (3) he must rid himself of all narrow prejudices and preconceptions.

The uterus is, so to speak, suspended as a floating body amongst the pelvic organs; every breath, every movement, every position of the individual, every degree of fulness of the bladder and rectum influencing its position. Its most, I may say its only, fixed point, is the attachment of the utero-sacral ligaments, which arise from the isthmus, or fundo-cervical junction, embrace the rectum in their division posteriorly, and terminate in the subperitoneal cellular tissue, as high up as the second lumbar vertebra. The vesico-uterine fold in front, and the broad and round ligaments at the sides, support it in its normal median position of slight anteflexion—the latter offering perhaps little, if any, resistance to the descent of the organ, and serving only as guys to steady it, and prevent deviation from its normal axis.

The supreme wisdom of this arrangement is self-evident, when we come to consider the marked changes of position, volume, and consistency, which the uterus undergoes in pregnancy. Under normal conditions, the natural tonicity of the pelvic floor and vagina is capable of preventing prolapse of the abdominal contents. There can be no doubt that much uterine support is afforded by the connective areolar tissue, which unites this organ with the pelvic walls, rectum, and bladder, as proved by the fact, that descent of the uterus is almost always found to involve prolapse of those viscera, and vice versâ. There is still another force, produced by negative pressure within the abdomen, called the adspiratory, or retentive power, which is dependent for its due exercise on the tonicity of the abdominal and thoracic muscles, the efficiency of the respiratory act, and the free and unhampered action of the diaphragm; and plays no small part in preserving the harmonious disposition of the pelvic and abdominal viscera.

Now, the uterus is not supported by one or two, but by a combination of those several factors, each contributing in some degree towards the retention of its normal physiological position. It is quite clear then, that the first point to be kept in view, if we would aim at successful treatment, is, that this physiological position can become disarranged only when any one or more of those supports is rendered weak or inefficient; when the normal mobility of the uterus becomes lessened or abolished, as the result of some previous inflammatory or other pathological condition, affecting the organ itself, or the surrounding tissues.

For all practical purposes, pathological deviations may be best divided into—

(1) Those which occur in the vertical planes, with deviation from the normal axis—flexions and versions.

(2) Those which follow horizontal planes — prolapse, elevation, inversion.

Besides these, there is another class of malpositions which it would be absurd to consider under the same heading, viz., those changes in the position of the entire uterus, caused by the pressure of tumours, any effusion into surrounding tissues, and involving no alteration in the direction of the uterine axis, or the relationship between the body and cervix—antero, retro, and latero positions. It is evident that the treatment of such malpositions is a matter of secondary importance.

In connection with prolapse, it must not be lost sight of, that as the uterus descends in the pelvis, the direction of its axis must change, to suit itself to that of the canal, through which it is passing, so that we will find retroversion associated with descent. Retroflexion may be also found complicating retroversion or prolapse.

I would here, too, direct attention to the fact, often overlooked, that the axis of the uterus may be faultless in its relation to surrounding structures, yet if the organ occupies a lower plane in the pelvis than normal, constituting perhaps a scarcely appreciable descent, the general disturbance may be as marked as in the worst cases of flexion or version. In this, as in all other pathological deviations, stretching of the ligaments and tissues, compresses the veins, and leads to chronic hyperæmia, metritis, hyperplasia, &c., with the long train of distressing symptoms pathognomonic of the "pelvic woman."

I have long adopted the following as the most practical and systematic tabulation of the causes of uterine displacements, given in their order of frequency :—

(1) Displacements due to influences forcing the uterus downwards.

(2) Displacements due to weakness or inefficiency of uterine supports.

(3) Displacements due to forces dragging the uterus out of position.

Speaking generally, it will be quite obvious that any of the causes of displacement will act, with much greater certainty of producing the pathological effect, if the uterine weight is increased from any cause, and if the organ remains in the relaxed and subinvolted condition sometimes incidental to labour.

I will now deal shortly with the most prominent of those causes which tend to the production of displacements in the civilised woman.

Under Class 1;—displacements due to influences forcing the uterus downwards;—may be included all conditions creating any abnormal intra-abdominal pressure; tight lacing and tight clothing suspended from the waist, ascites, tumours, constipation, any excessive muscular exertion, &c. Of these, I shall place in the fore-front the pernicious habit of tight lacing. The evil effects of this cruel custom on our womankind cannot be over estimated, or too strongly insisted upon. This part of my subject will apply, with special force, to the present generation of Australian women; for no man, with a practical knowledge of the special subject, can deny that uterine displacements, as well as all other pelvic lesions, are much more common here than in the older, less feverish, and less artificial countries of the world. Here, the iron rule of fashion holds absolute sway with the great bulk of our women, and dictates without compromise the style and manner of dress. Here, we find in full and unrestricted operation the many agencies which are most potent in the production of that anatomical and structural alteration of the womb, so notoriously prevalent in this country. No one, who cares to enquire into the

subject, can help seeing the mischief women do themselves, and the race generally, by constricting the lower half of the chest, and most of the abdomen, in what that master mind, Herbert Snow, so tersely describes as a "rigid circular splint."

The immediate and inevitable result may be epitomised as — anatomical displacements, followed by morbid structural changes in important tissues and organs; mechanical interference with function, with loss of muscular power and nerve force. It is lamentable, that most of the special ailments of adult civilised women should be thus self-inflicted; but the horrors of the situation are infinitely enhanced when we consider, that those vicious customs in dress, are constantly being applied to female children of tender years.

It may be, it no doubt is, a gratifying thing for a woman —the faithful slave of fashion—to feel that she is able to develop what she considers the beauties and fascinations of her figure, while she conceals its would-be defects; but the wretched imposition is bought at too high a price. The unhappy interference with the beauty and harmony of Nature's work only too often brings its own penalty. Her functions will assuredly become imperfect, her visceræ displaced, her abdominal and thoracic muscles wasted, and her abdominal retentive power lost. She lays the groundwork of chronic invalidism. She unfits herself for the responsible obligations and congenial occupations of a wife. She is denied the pleasures of a healthy maternity, and will, in all probability, leave not a single heir to heart and home.

I am not going to enter upon an exhaustive enquiry into the many evils of tight lacing, for, to do such a theme adequate justice, one should travel through almost the whole range of Medicine, as well as a large portion of the domain of Surgery; but, in dealing with the many agencies that exert

their influence on the genesis of uterine displacements, one cannot help giving it special prominence, and I feel constrained to denounce, in the most unequivocal terms, a practice which so conspicuously influences for evil, the health of the generative organs of the civilised woman, and at once places her on a level with the Indian squaw who flattens her head, and the Chinese woman who compresses her foot into an unsymmetrical mass.

Under Class 2 ;—displacements due to weakness or inefficiency of uterine supports ;—we generally find the cause associated with increased weight of uterus, and resulting from previous puerperal conditions.

Here, may be found not only the large subinvolted uterus, which I maintain should not, *per se*, involve any risk of displacement, but also a yielding dilated condition of vagina and perineum ; uterine ligaments, which contain uterine tissue, lax and weak ; and in all probability a complete loss of abdominal retentive power—the abdominal and thoracic muscles being atrophied, and deprived of all tone and health by previous non-use, and the compression exercised by the “circular splint,” and tight clothing suspended from the waist.

That, increased weight of uterus, uncomplicated by the conditions described, is unattended by increased risk of displacement, is strongly evidenced in the natural healthy woman, by her general freedom from any of the usual abnormalities of position, during the early months of pregnancy, while yet an enlarging and heavy uterus occupies the true pelvis, as well as by the almost complete absence of malpositions amongst savage races.

During an extended trip through remote parts of Queensland and New South Wales, I enquired into this question closely, and found a most striking immunity from displacements of pelvic organs amongst the aborigines of those colonies, notwithstanding the fact that they do not observe

the recumbent posture for any time after confinement. Those women will continue their usual toil almost up to the moment of delivery, and after a short interval of retirement from the camp, will return with their much prized "picaninny," only to resume their routine labours, and perhaps trudge several miles to the nearest creek to perform their post-partum ablutions, without suffering ill consequences of any sort. This goes to prove, not only that increased weight of uterus is not, *per se*, the absolute cause of post-partum displacements, as it is popularly credited to be, but also the more important truth, that woman under natural primitive conditions of life, is gifted with more marked recuperative power and vitality, as well as a more stable condition of all her uterine supports, than her sister in advanced society. I am convinced that all the uterine deviations, resulting from previous puerperal conditions, so common in civilised life, are directly traceable, not to increased weight, as we have been taught to believe, but rather to weakness and relaxation of uterine supports, the penalty of antecedent pernicious customs, or the accidents and injuries inseparable from tedious, inefficient and assisted labours.

There is another custom, found only in civilised life, which I cannot help thinking is responsible for many of the displacements following parturition—I refer to the use of the tight binder and pad. For several weeks the nurse—under the pretext of preserving the figure, but in reality to save her own reputation, which depends largely on the thoroughness with which she develops this abominable practice—keeps up forcible compression over the enlarged uterus, while she rigidly insists on the level dorsal decubitus, with the result, that she generally succeeds in forcing the organ backwards into the hollow of the sacrum, when the displacement becomes the inevitable cause, rather than what

it has heretofore been generally described as, the consequence of subinvolution and chronic metritis. The obstetric surgeon is in the habit of using it as a safeguard against post-partum hæmorrhage; but dependence on so incomplete a remedy must have cost humanity many a valuable life, and to aim at the treatment of so grave an emergency by such trumpery means, should be unworthy of the age we live in.

Before quitting this part of my subject, I would fain emphasise my firm belief, that prolonged dorsal decubitus is not, in the healthy female, absolutely essential to involution; that its enforcement interferes with thorough uterine drainage; that the tight abdominal binder and pad are unscientific and uncalled for; and that their indiscriminate use is a most fruitful source of many pathological deviations, and other conditions, heretofore attributed solely to increased weight of uterus. Will any man dare for one moment to assert that woman, the most perfect work of Creation, was foredoomed to such helplessness and degeneracy as to be hampered with the dire necessity for such artificial aids to the normal discharge of a physiological process. Such an assumption would be simply outrageous. I do not mean to preach the doctrine, that our puerperal woman will derive no benefit from remaining in bed a reasonable time after her delivery, or that a well-fitting bandage, applied for purposes of bare support, and without exercising any undue compression, may not be a source of great comfort. I will admit, at once, that those civilised women who remain in bed for a few weeks, are in a better condition at the end of the puerperium than those who abandon it earlier. In those women, whose forces are weak and inefficient, from such causes as I have already enumerated, labour involves much consumption of strength, and is followed by more or less exhaustion, and desire for rest. The superstitious belief then, in the

lying-in custom, must be credited with undoubted advantages in these days of feverish artificiality, when woman would appear to have recklessly abandoned herself to all sorts of denaturalising influences.

I have already said that any of the causes of displacement will act, with greater certainty of producing a pathological effect, if the uterine weight is increased; if the organ from any cause remain in the relaxed subinvolved condition sometimes incidental to labour. It is very evident then, that any discussion of this much confused subject, must fall far short of practical benefit to the student of gynæcology, which does not deal with the various agencies that are found to arrest, or delay, the natural retrograde metamorphosis of the uterus after labour, and give some sound idea of the exact pathology of this condition. All the definitions of subinvolution that appear in text-books I consider vague and unsatisfactory. They furnish with no evidence of the exact pathological condition of the uterus so affected.

From a strictly technical standpoint, I look upon subinvolution, pure and uncomplicated, as a condition intervening between the normal post-partum uterus, and chronic metritis; and usually starting with traumatism or septic absorption. Subinvolution and chronic metritis are really but different degrees of hyperæmic activity. One, so to speak, merges into the other; yet they are pathologically distinct. In subinvolution, we find no inflammatory products, or new tissue formations, the tissues being the same as in the normal uterus, but of course, more developed from previous gestation, and usually showing, on microscopic examination, some evidence of fatty degeneration.

It is now universally recognised, that the due fulfilment of the function of lactation is essential to the complete involution of the uterine tissues, during the normal puerperium. The trophic sympathy between the breast and uterus, and their marked subordination to nerve influence, natural or

abnormal, are to-day familiar to everybody. Here again, I am reluctantly forced to reproach the fairer half of our community, more particularly those in the higher walks of life, with deliberately impeding their sexual organs in the due discharge of their allotted functions. The suckling of one's offspring is the highest and most fundamental duty of maternity, and the woman who, to enjoy the ephemeral and unwholesome pleasures of society, refuses to discharge this sacred function, is guilty of a gross violation of Nature's laws, wilfully frustrates the noble purposes of her being, is unworthy the name of mother, and should have been ruthlessly relegated to barren spinsterhood.

It is only those who are suffering from some physical infirmity, or bodily affliction, which renders lactation inadvisable, or may be injurious to the child, can be excused.

We are told that another very fruitful source of arrested involution is to be found in leaving the recumbent position and going about too soon after labour. But here, too, as I have already indicated, the primary cause of the pathological condition is some previous enfeeblement of, or injury to, the uterine supports, with the usual general loss of tone and reconstructive power. It is only where those latter conditions exist, that increased weight of the organ leads, on the assumption of the erect posture, to the unbroken chain of evils—derangements of position, subinvolution, chronic metritis, too frequent and profuse menstruation, leucorrhœa, backache, general mental and bodily distress—which would seem to be the heritage of the much enlightened woman of our time.

It is deplorable, but yet true, and it does not require much research to show that woman, as we now find her, amid the highly artificial surroundings of modern civilisation, has fallen from her normal state. The evolution of her degeneracy may be divided into three eras :—

(1) *The Savage*.—Here women under primitive conditions of life—Australian Aboriginal, Brazilian, Negro—surrounded

by an environment with which they are in perfect accord, will, a few hours after delivery, resume their usual toil, without ill effects of any sort.

(2) *The Civilised*.—I would have this era, or stage, exemplified by the peasantry of older, less feverish, and less artificial countries—England, Ireland, Scotland, &c. Here women will rise after labour and attend to their every-day duties on seventh to ninth day, often earlier, and yet they enjoy a marked immunity from uterine displacements, or other affections of special organs.

(3) *The Denaturalised*.—How different with the woman who practises the customs, and conforms to the usages of civilised society, as at present constituted, in large centres of population, and in young communities like this, where the external conditions of life, in respect of physical vitality, are so demoralising. Here, the woman of fashion, comprising all grades of society, from the lowliest denizen of the bush to her who glories in fretted halls—for all are fashion mad—shows the most marked tendency, not only to displacement, of the uterus, but also to general morbidity of the generative organs. Notwithstanding the many attentions that are bestowed upon her, during a lengthened puerperium, by that autocrat of the lying-in room, the monthly nurse, she is still, on assuming her ordinary duties, the victim of many aches and pains, and a frequent occupant of the doctor's chair. She is tenderly nursed and forcibly bound, liberally drugged, copiously douched, and carefully dieted. All possible sources of infection are carefully guarded against. Every detail that modern scientific thought can suggest, with a view to promoting her convalescence, is attended to. Still, during the whole period of active life, her existence would seem to be one of constant suffering.

As to the production of special varieties of displacement, circumstances, often more or less difficult to appreciate,

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determine the direction of the malposition ; whether it be ante or retroversion, or flexion, or prolapse. The same causes which produce simple prolapse in one person, may lead to retroversion with descent in another, in a third to retroflexion ; the determination of individual cases being entirely a question of mechanical forces, leading to certain results.

As I have already said, the normal position of the uterus is one of slight ante-versio-flexio, and there are authors of repute who maintain that those terms should be expunged from our pathological nomenclature ; but so radical a reform would hardly be in accordance with facts. For no man, with a knowledge of the anatomy and mechanism of the uterine supports, will deny the possibility of anterior deviations becoming pathological, in cases where there has been any antecedent subinvolution, or metritis, associated with peri-metritis, or para-metritis involving the utero-sacral ligaments, causing their contraction, and posterior fixation of the isthmus. This latter condition would seem essential to the production of anterior displacements. Otherwise, retro-deviations will be the natural consequence of any intensification of intra-abdominal pressure—puerperal or virginal—more particularly if there be a relaxed subinvolted condition of uterine supports, with any increased weight of uterus. Such is the sequence of events with the average puerperal woman, who is subjected to the usual prolonged post-partum dorsal decubitus, tight binding, &c., as well as in those cases of prolonged and frequently recurring retention of urine, as demanded by the social customs of to-day.

The most frequent combination in the production of prolapse, is rupture of perineum or cervix uteri, or of both, leading to subinvolution of vagina, uterus, and uterine supports. Bearing on this question of individual displace-

ments, there are a few important general facts which it may be well to remember :—

(1) Retro-deviations are quite common in unmarried and nulliparous women, while prolapse is very rare.

(2) Both retro-deviations and prolapse are to be found chiefly among parous, hardworking women.

(3) Prolapse is very common amongst old women, in all conditions of life.

Having thus carefully enquired into the etiology of uterine displacements generally, and their relationships to civilised life, it should not be difficult to formulate a rational line of treatment. Here perhaps, more than in any other department of scientific surgery, the golden truism, that “until the cause is removed its effects must of necessity persist,” holds good. We would be infinitely greater benefactors to humanity, and more effectually promote the physical well-being of our womankind, if instead of endeavouring to overcome the effects of pressure in one direction, by counter-pressure in another, of opposing force to force, as shown in the general use of the abdominal belt and corset; if instead of “impaling the unfortunate uterus on a stem,” or hoisting it on davits—in the shape of one or other of those “contorted pieces of wood, metal, or vulcanite,” called pessaries, we tried to grasp the true principle for the relief of the various displacements, by seeking the sources whence those troubles spring, and by an honest unflinching advocacy of Nature’s laws.

The treatment by pessaries, which has unfortunately become so popular, can never be more than temporary and palliative in its results. Mr. J. Halliday Croom leaves no room for doubt on this point, when he tells us, in forcible language, that “vaginal pessaries are seldom if ever curative, and that intra-uterine pessaries are surrounded with such risks, in the direction of inflammation, hæmatocele, and

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ovaritis, that he has discarded their use altogether." With his views I am in perfect accord. "I hate pessaries," says Lawson Tait. "I never use them if I can help it, and I have many times wished they had never been invented." With so trenchant a condemnation, of what may be called the mechanical method of treating displacements, coming from the front ranks of the advanced school of to-day, we should at least hold our hand, and weigh well the indications for, and the dangers that may accrue from, the adoption of such a line of treatment.

The various forms of vaginal pessary now in general use, not only do no permanent good, but very frequently lead to most annoying and serious consequences. Who amongst us has not seen, over and over again, the inflammation, the abrasion, the free vaginal discharge, that must follow from the pressure of an ill-fitting pessary. We have all come across instances of retro-deviation and prolapse;—resulting perhaps from lacerated perineum and increased intra-abdominal pressure;—that were treated, regardless of the cause, by the everlasting pessary, but this time, large enough to force the posterior vaginal wall up into the pelvis, far above its normal level; and resulted in atrophy of the muscular tissue of the vagina from over-distension, and inevitable recto-vaginocele on its removal.

It is a matter of every day experience, to find all the symptoms of retroflexion aggravated by the application of a "Hodge;" the pessary fitting into the angle of flexion, and not at all elevating the fundus. But worse than all, how often are we not confronted with cases where the very existence of the patient is jeopardised by this obnoxious system of treatment; where the presence of adhesions is an absolute contra-indication to the use of all such mechanical supports; and where the appendages are so much involved as to render all such bungling attempts at cure positively

dangerous. Here, too, we should consider the dangers that are inseparable from the free admission of a germ-laden atmosphere, and the retention of pathological secretions which must result, according to the shape and size of the pessary used.

While thus condemning the indiscriminate use of pessaries in the treatment of displacements, I wish it to be understood that I do so, more with the desire of directing the attention of the profession to the wholesale empiricism practised in this branch of special ailments, and the opprobrium attaching thereto, rather than of entirely discouraging appliances, the intelligent use of which, *as adjuncts to treatment*, may sometimes be attended with considerable advantage.

Now, it may be taken for granted, that anything which promotes the abdominal retentive power, will directly lead to elevation of a dislocated uterus, and conduce to its retention in a normal position. Therefore, I hold, it becomes the duty of the surgeon to do everything in his power, to render obsolete, for ever, those pernicious systems of modern female dress, that are attended with so many, and such serious consequences to the wearer. Here, we have a field for health culture and reform, the successful champion of which, would confer more untold benefits on humanity than ever immortalised a Hunter or a Lister.

If there has been previous injury of the pelvic floor, which was not dealt with by immediate operation, this structure should be repaired as soon as its tissues have sufficiently involuted to admit of surgical treatment. While on this subject, I feel forced to characterise the conduct of any man as grossly neglectful, and reprehensible, who, in the face of the many evils that may follow laceration of perineum, would disregard it, and defer its treatment.

I have already drawn attention to the self-evident fact, that increased size and weight of uterus render it more

amenable to any exciting cause of, and therefore more liable to, displacement, more particularly retro-displacement; and I have also said that displacements of the organ lead to disturbances of nutrition, congestive enlargement, and chronic metritis—the increased weight in the one case predisposing to, and in the other resulting from, displacement.

Herein, lies the key to the treatment of such complicated malpositions. It has been, for some time, a much disputed question, whether the complicating increased weight and metritis should be first treated, or the displacement reduced. To those who are mindful of the wholesome proverb—*Sublata cause tollitur effectus*—the cure of such conditions will involve no difficulties.

In the first class of case, we should direct our treatment, *ab initio*, to stimulating the normal involution of the uterus and its surrounding tissues, and overcoming inflammation—by such measures as curetting, hot vaginal douching, &c.; by the administration of chlorate or bromide of potash and ergot; by trachelorrhaphy (Emmett); by amputation of cervix (Simon Marckwald or Schröder), if marked hyperplasia, granular degeneration, &c., exist; by insisting on the due fulfilment of the function of lactation. I have always found, with almost unerring certainty, that the discriminating application of those measures led to the early reduction of such displacements, if the uterine supports had not been previously injured, or rendered inefficient from some cause.

In the other case, if it has not become fixed by peri-metritis or peri-salpingitis, we should endeavour to replace the uterus, and retain it *in situ* with a proper fitting pessary, and thereby relieve not only the venous tension and nutritive changes, so favourable to the development of inflammation, but also the many distressing reflex disturbances, due to prolapse of the

adnexa, which is so generally associated with displacements.

But we must not rest satisfied with the relief of existing symptoms. Our treatment is still incomplete and unsatisfactory, unless we have found the primary exciting cause, the removal of which can be our only hope of establishing a permanent result, or relieving our patient from the annoyance of the ever-recurring dislocation.

We must not lose sight of the proverb that, "he who cures a disease may be the skilfullest, but that he who prevents it, is the safest physician."

Woman should be made to recognise that, though mistress of Creation, she is still subject to the kindly laws of life; that self-preservation should be with her, as it is with every living thing, the guiding principle of existence, and that without it, all her highest obligations to existing, as well as to future, generations become impossible. The necessity for proclaiming such golden truths, and insisting, as far as possible, on their due observance, is evident, if we honestly consider the physical degeneracy of the fashionable female of the present day, and if we acknowledge, as we must, the harmful influences that may result to the child, through abnormal conditions of the parents. No one will now deny, that the bodily deformities which we designate fashion, and the utter disregard of all physiological law, must involve disregard of offspring, and lead, either directly or indirectly, to variations. There is no more potent or incontrovertible truth in life, than that any such persistent abuse of body or mind, as injures it, will involve injury of descendants. Then, I say, it is the sacred duty of every woman who hopes to become a mother, to so live, as to preserve all her organs in their normal state.

ALEXANDER-ADAMS OPERATION MODIFIED, A SERIES OF TWENTY-ONE CASES.

There are some chronic retro-deviations which will not respond to either medicinal or prothetic measures, and would seem to defy the law of removal of the cause, while others may be rectified, only to recur immediately, on stoppage of the treatment and removal of the support. Such are those chronic retroversions and retroflexions which are found associated with prolapse, and more or less anterior or posterior colpocele, or with prolapse of ovaries, rendering the use of pessaries impossible.

For the radical cure of those displacements, we must have recourse to one or other of two procedures—operative shortening of round ligaments, or abdominal hysteropexy. The former was first suggested by Alquié, of Montpellier, for “prolapse.” Later on, two English surgeons (Alexander of Liverpool, and Adams of Glasgow) performed the operation about the same time, and invested it with fresh interest. Within the last few years it has been most happily modified, and brought within the range of possible and palpable surgery by Dr. Geo. M. Edebohls. I have now performed this modified operation (only dispensing with the drainage of the inguinal canal) twenty-one times, with the most satisfactory results in every instance. I shall just give short notes of my first case, which is fairly typical of the series:—

Mrs. O'H., Parranatta, Sydney, æt. 32, married six years, no children, came under my care on July 1, 1892. She complained of severe bearing-down pains in the lower abdomen and back, weight in rectum, with tenesmus, menorrhagia, frequency of micturition; suffered from violent intermitting headache, and had aborted twice. There was no history of pelvic peritonitis.

On examination, I found the uterus enlarged and retroverted, but freely movable. She had been under previous treatment, and had worn pessaries of all designs, without any lasting benefit.

Preparatory to operation, which was at once determined on, I reposed the uterus and had it retained *in situ* by a soft well-fitting ring pessary. I advised rest in bed and total suspension of the marital function, hot vaginal douching, and chlorate of potash and ergot internally—a combination which I may, after much experience, be allowed to place first in the list of remedies for the

cure of subinvolution, and the chronic metritis that results therefrom.

On July 28, I proceeded to operate. The following description of the technique of the operation, with some modification from my own experience, is based upon Edebohl's papers, in the *New York Medical Journal*, October 11, 1890. Having found the pubic spine, a two and a half inch incision was made from above it, in the direction of the inguinal canal, exposing the external ring. A grooved director was now inserted into the external ring and pushed along the inguinal canal, close to its anterior wall, as far as the internal ring. The anterior wall was now divided in the direction of the course of the aponeurotic fibres, along its whole length. The internal ring was now felt, and the ligament was easily found, as a well-marked, oval, strong band of fibres, with a ligamentous sheen, emerging therefrom. It was brought out by a blunt hook, and separated from its attachments.

Speaking, however, from later experience, it is not always quite so easy to find the ligament. It may be looked for; with most certainty of finding it; in the inferior and outer part of the canal, nestling behind Poupart's ligament.

The chief difficulty in performing the operation is the finding of the ligament, more particularly *if we look for it in the canal, at a distance from the internal ring*, owing to its separation into fibres for insertion into the walls of the canal. With one hand pulling on the round ligament, in a direction at right angles to the plane of the aperture of the ring, the reflection of peritoneum from the broad ligament, which was drawn out in the form of an inverted funnel, was carefully peeled back off the ligament with the finger tips, until three or four inches of it had been exposed. The wound was now protected with wet perchloride gauze, and the operation performed in the same manner on the opposite side. The drawn out ligament, still attached to the pubis, was now taken charge of by the assisting surgeon who, by means of a blunt hook, made the necessary traction in the direction of the open canal. In this situation it was secured by sutures of silkworm gut in the following manner:—The first suture being introduced at the level of the internal ring, it was passed through one lip of the wound—embracing skin, fascia, and aponeurosis of external oblique into the inguinal canal. Now the tightened ligament was pierced trans-

versely by the needle, which then traversed the other lip of the wound, penetrating in succession the cut fascia of external oblique, subcutaneous fat, and skin. Four sutures were passed in a similar manner through all the tissues on either side of the wound, piercing the round ligament in their course across the canal. These sutures, when tied upon the skin, obliterated the canal, and at the same time ensured the most thorough fixation of the shortened ligaments within their own habitat. The excess of ligament protruding from the lower angle of the wound, about three inches, was now cut away. Edebohl drained the inguinal canal by passing three or four strands of silkworm gut along the bottom of the wound, emerging at either end. I do not think the latter procedure necessary, and have not resorted to it in any single case. I have in every instance by careful coaptation of surfaces, and thorough asepsis, secured immediate union and uninterrupted recovery.

During convalescence, I have in every case maintained the uterus in position by a well-fitting Hodge pessary, introduced before the operation. By this means, the ligaments were relieved from the traction, which the uterus could not otherwise have failed to exert upon them, through the tendency to recurrence of the displacement. The pessary was left *in situ* for a month, which the patient spent in the recumbent posture.

As a result of my experience of the Alexander-Adams operation, I am forced to declare, most unhesitatingly, in favour of the modification of its technique, such as I have applied in this series of cases. We have now for twelve years been led to believe, by advocates of the original operation, that picking up and shortening the round ligaments at the external ring was not only possible, but easy of accomplishment, and invariably attended with the best possible results. It is hard to rid the professional mind of prejudices in favour of any surgical procedure that it has become accustomed to. Men are only too prone to take everything for granted, and follow the beaten track.

While allowing the possibility of finding a few fibres or fasciculi of the ligament at the external ring, and exercising sufficient traction on them to influence a light, freely movable uterus, I cannot—after frequent and careful endeavours to isolate it, prior to laying open the canal by the modified method—admit that it

is either easy of accomplishment, to find it in anything like its full strength, or that it is ever attended with the best possible results. I cannot help expressing my strong suspicion, that, in the hands of the ordinary surgeon, a fasciculus of the internal oblique muscle, or a band of connective tissue, with possibly a stray fibre of the ligament, has been frequently sutured at the external ring, while the self-satisfied operator congratulated himself on the facility with which he "picked up" the ligament.

The drawbacks of the original operation are self-evident. It is difficult to satisfactorily separate the subdivisional muscular fibres that may be found at the external ring, more particularly in nulliparous and unmarried females, whose ligaments (round) have never become hypertrophied, in response to the stimulus of pregnancy; and if successful in doing so, we must miss the fibres of insertion into the inguinal canal, and any traction that we may be able to make on the ligament must draw out its peritoneal covering (the canal of Nuck) in the form of an inverted funnel, making a potential bowel or omental trap—a menace to the patient's health and life ever after. The presence of adhesions is an absolute contra-indication to this operation, except where they can be broken down by gentle manipulation.

THE VERÆ CAUSÆ OF CANCER.

[Read before the Medical Society of Victoria.]

In view of the greatly enhanced prevalence of malignant diseases, and of the ever increasing number of victims those loathsome and repulsive affections are claiming at our doors, no man can deny their high claims on our attention, and it would seem not unreasonable to hope that an intelligent discussion of their etiology may be productive of much good. With this object I will preface an account of a case of removal of the uterus for malignant disease, by some remarks on what I have termed the *veræ causæ* of cancer.

It seems to me a strange anomaly that we should devote so much time and attention to maladies of phenomenal rarity, such as leprosy; while we look on with perfect indifference at a class of disease of every day occurrence, whose genesis is directly due to an abrogation of Nature's simplest laws, and is so amenable to prophylaxis.

Nobody will question the greater liability of the female sex to cancerous diseases. The statistics from the Registrar-General's fifty-second annual report show that of every twenty-one men, and every eight women, who live to be thirty-five years of age, one will respectively die of cancer.

In the great majority of instances, the female uterus and breast are the parts attacked; while men are enormously more prone than women to malignant affections of the tongue, buccal tract, œsophagus, and stomach, and it is an interesting and significant fact, that when we investigate parts not influenced by marked differences of function, or the mode of life characterising the sexes—what may be termed neutral ground, such as the internal viscera, lower part of the intestinal tract and lymph glands—we find both man and woman appear to suffer in equal proportion.

Time will not permit me to travel into the fields of exemption in woman and proclivity in man. I will confine myself to that province in which the peculiar liability of women to malignant disease is displayed—the uterus and breast. Why are malignant diseases of these organs so frequent?

As the cardinal feature in all cancer growth is an abnormal cell proliferation, it is reasonable to assume that any organ specially rich in cell elements would be much more liable to malignant developments than one not so circumstanced; but when we come to consider that the lymph glands and liver, organs markedly parenchymatous, do not show any special tendency of this kind, it is evident that we must look for some additional causation factor.

Now, there are certain conditions found in the uterus, or at least that portion of it whence malignant growths almost always spring—its lining membrane—which at once suggest a special liability to cancerous diseases. Here we find the cell elements undergoing frequent modifications and changes in their growth and arrangement, and here the nervous system exercises the most

absolute control over those histological variations (as demonstrated in the menstrual process). As soon as the malignant process is initiated, the normal healthy ratio of cell elements to well formed tissue is lost; the little specks of protoplasm or cells which form the bulk of every malignant tumour, appear to throw off all allegiance to the central nervous authority, and seem no longer subject to the laws which regulate the healthy organism; they proliferate luxuriantly, are nourished, and grow—as all parasites do—at the expense of the host which affords them shelter.

In by far the majority of instances of malignant disease of the uterus and breast, the variety is carcinoma, of which of course the glandular lining is the parent tissue. What antecedent history do we generally get? In a comparatively small number of instances, we find cancerous formations initiated by direct mechanical injury or irritation, the net result of which must be brought about by lowering the vitality of the part, and destroying, more or less, the physiological balance of its tissues. Cancerous growths of the connective tissue variety (true sarcomata) appear generally to follow some sudden rupture or other injury of connective tissue elements, by a blow or strain. The injury is often of a trivial and passing character, does not give rise to the slightest suspicion of serious consequence, and is soon forgotten.

In squamous epithelioma of mucous surfaces there must, almost of necessity, be a superficial lesion; a crack, cut, or abrasion as a starting-point. Then, "the door for the initiation of the cancerous process is thrown widely open" (Snow), and continued irritation of the adjoining tract does the rest. The mechanism of production of a small percentage of breast carcinoma may be explained in this way, and I have no doubt we may, without fear, ascribe a few examples of the uterine disorder to a similar agency.

Before quitting this, the most palpable factor in the etiology of the cancer group, I would fain direct special attention to the manner in which such specialised papillæ of the skin as hair, feathers, and teeth are developed. The researches of histologists have established conclusively the truth of the contention, that these structures, as well as glands of all kinds, are developed essentially on the same plan as cancers—an epithelial down

growth into the subjacent tissues. It is undoubtedly an interesting and suggestive fact, that abnormal irritation will frequently produce hair in an unusual situation, and we are all conversant with the elongation of cutaneous papillæ into warts under similar circumstances. In like manner, glands will respond to irritation and grow, but the point which I would emphasise is, that a continuance of those conditions will frequently lead to the development of cancer.

Bland Sutton describes cancers as "adherent glandular formations that grow aimlessly, and have no function to keep them in subjection." This view gains weight from the fact that, in their intimate structure, they resemble the glands in the immediate neighbourhood of which they grow. Thus, cancer of the lip resembles cutaneous glands; in the liver, it mimics the liver; mammary cancer resembles imperfect mammary tissue, and so on.

In the large majority of those cases of cancer which are met with in every-day practice, and furnish the bulk of mortality statistics, no such mechanical exciting cause can be detected. We must, therefore, look for some other explanation of the malignant tendency and chronic invalidism, which would seem to have become the heritage of the civilised woman. This we will readily find in various depressing neurotic conditions. Herbert Snow has laid it down as an axiom, that failing a mechanical exciting cause, a neurotic is always to be found.

It must here strike us as noteworthy, that not only is it the more neurotic and emotional sex which principally suffer from cancer, but also that the organs most prone to diseases of this class are, in health, specially influenced by emotional conditions, and by abnormal states of the central nervous system, as I have already indicated. If we carefully investigate the personal history of cancerous patients, we cannot avoid being struck by the large number who tell us of some immediately antecedent trouble or anxiety.

Most recent systematic writers agree, that mental distress ranks as the first and most constant factor in the genesis of cancer; but the undoubted agency of several others, such as exhausting toil and prolonged illness must not be lost sight of, as they constitute a weighty addition to the many other influences that promote its development. Everybody must have seen cases which will

establish beyond doubt the reality of this connection. The immediate sequence is a matter of daily familiarity. I myself have met with many instances in which the cause and effect seemed so obvious and decisive that, to question their close relationship, would seem like struggling against the inevitable.

There are some other general factors bearing on this aspect of woman's health, and the rapidly increasing prevalence of cancer, which, though apparently trivial at first sight, demonstrate very forcibly the truth of the old proverb, that "great events from little causes spring." I will merely mention the most serious and noticeable amongst them:—Constipation, tight lacing, excessive use of neurotics—tea and coffee, "cramming" at school. The *modus operandi* of such agencies has not been clearly explained; but there is little doubt, that they act by producing defective innervation and depressed nutrition.

It is only during the past few years that cancers have come to possess any really scientific significance. In the light of recent biological research, it does not appear improbable that they are, like infective tumours (Paget's "Disease of Breast and Actinomycosis"), directly due to the growth of some specific micro-organism, vegetable or animal. This would seem to be the most rational hypothesis, and the only one that will satisfy all the requirements of the case, and explain all its facts and phenomena. Although no specific micro-organism has, up to the present, been cultivated, there is little doubt that we are already on the threshold of this great scientific achievement. The evidence of most leading pathologists points to its early realisation. We find Hanau of Zurich, Weber and Eiselberg, successfully transferring or engrafting epithelioma, carcinoma, and fibro-sarcoma from one animal to another. We find Professor Kubasoff, of Moscow, after a long period of bacteriological research, arriving at the conclusion, that cancerous growths are caused by a special pathogenic rod-shaped microbe which, when inoculated under the skin of animals, gives rise to cancerous degeneration, commencing in the nearest lymphatic glands, and subsequently spreading to the internal organs. We find that Albarran, Darier, Thoma and Wickham have found an organism in cancer, which they describe as belonging to the protozoa. We find Delepine, Duplay, and Cazine demonstrating the presence of psorospermia and coccidia

in epithelial tumours and cancers. We find Sudakewitch, who has obtained specially good results in his experimentations, demonstrating most accurately certain micro-organisms, which Metchnikoff asserts are nothing else than psorospermia and coccidia. We find Dr. W. Russel describing, before the Pathological Society of London, the existence of protoplasmic bodies which he terms the characteristic organisms of cancer, and which are now known as "fuchsine" bodies. Woodhead, in his "Practical Pathology," lately published, says:—"There can be no doubt whatever, that the organisms to which Dr. Russel draws special attention, are similar to those described by other observers as psorosperms." Whether these parasitic bodies originate the malignant process, and are the cause of cancerous infection, or whether they result therefrom, has not been finally decided; but when we consider that all recent biological research has proved their occurrence in the epithelial cells, and that they undoubtedly give rise to cell proliferation, as proved in the lower animals, we must, at least, admit the strong probability of their causal agency in the production of cancers.

I shall not dwell at any greater length on those many general causes which help to produce so deplorable a condition of things amongst our womankind, than to indicate:—

(1) That whatever produces chronic ill-health depresses the nervous system, and is clinically found to constitute an influence strongly predisposing to cancerous developments generally.

(2) That local agencies exert only a minor influence in their direct genesis.

(3) That while rapidly increasing in prevalence in civilised nations, they are almost absent among the savage.

(4) That malignant disease is in very many instances primarily local, and due to disordered functions, as proved by the fact known to all surgeons, that the disease, when promptly removed, may never recur.

(5) That benign ulcerations may become malignant, when it may be assumed the phagocytic action of the leucocytes has become subjugated by the micro-organism.

(6) That disease of any kind, whether malignant or inflammatory, never occurs in an individual whose functions and nervous system are in perfect health, and who has, as a consequence,

perfect local and general resistance to all pathogenic micro-organisms—in whom phagocytosis is healthily and perfectly accomplished. (And here I may be allowed to say, that Mr. Jonathan Hutchinson insisted that cancer is simply a modification of what occurred in chronic inflammation).

(7) That when, from continued irritation, depressing influences, or advancing age, the physiological character and vitality of the animal cells become lowered, cancer finds all the conditions necessary for its growth.

(8) That, in a word, cancerous disease is but one of the many proofs of over-pressure on the nervous system, which the artificial and vicious conditions of modern civilisation involve.

The case I bring before you is as follows :—

A. S., *æt.* 21, single, tailoress, was admitted into the Women's Hospital, on April 15, 1892. Patient was very pale and anæmic, and was in a very low condition. She complained of great weakness, pain in the lower part of the abdomen, and a very offensive vaginal discharge. She was fairly well, up till eighteen months previous to admission, when she was confined. Since her confinement, she has gradually become very weak, and has never been free from abdominal pain. Her parents are both alive, *æt.* about 55 years. The mother is a very healthy woman; but the father, a powerful labouring man, has a tumour of the right side of the neck, which appears to be malignant. The mother states that her daughter fretted a great deal during the time she was pregnant, and has been very despondent ever since her confinement.

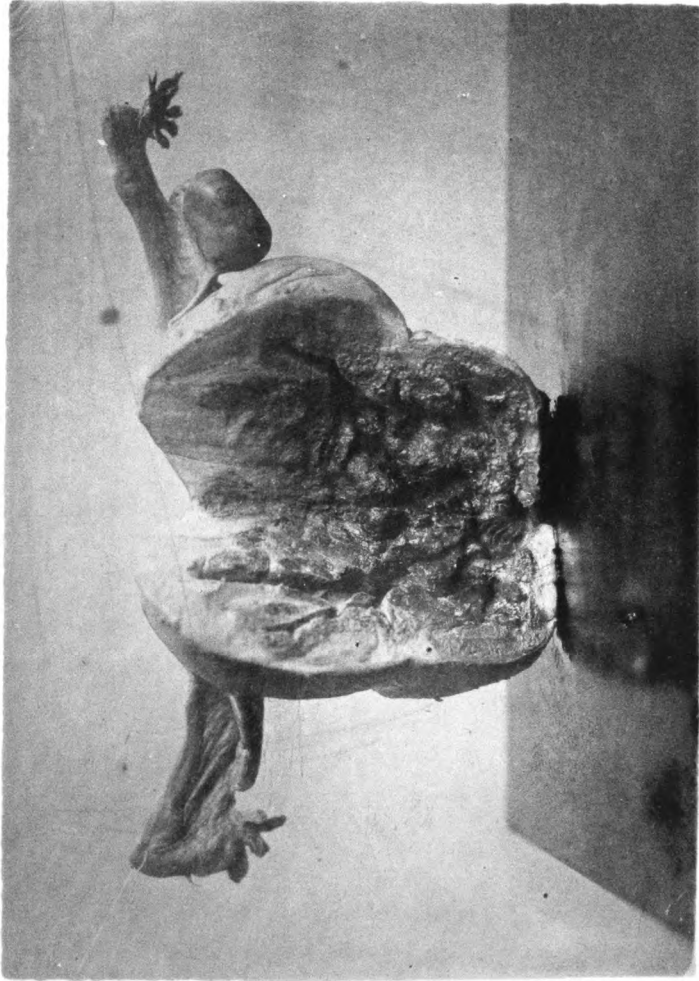
On examination, patient was found to be very thin; temperature 101°. The abdomen was sunken except in the midline just above the pubes, where the uterus was very prominent. She was very tender over the uterus, and in both ovarian regions. The vagina was roomy, and almost full of a very offensive discharge; the discharge was seen to come from the uterus. The cervix was very granular, and covered with small papillomatous growths. The finger could with ease be passed into the uterus. The endometrium, from the internal os almost to the fundus, was very rough, and bled freely on examination. The sound passed nearly six inches; the uterus was free and movable, and the broad ligaments did not appear to be diseased; the right ovary was enlarged and very tender.

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Patient had been under treatment for a considerable time in Albury, and the uterus had twice been curetted.

As there was little doubt that it was a case of malignant disease of the uterus, and as no other structures were apparently involved, it was decided to do hysterectomy. For ten days previous to the operation, the uterus was irrigated twice daily with corrosive sublimate solution 1 in 3000, and once daily two eight-grain iodoform suppositories were passed well inside the internal os. The fœtor was considerably reduced, but the temperature did not decline, and three days before the operation it registered 104·4°.

Operation.—The uterus was much too large for removal by vagina, so I determined on the operation of total extirpation by the abdomino-vaginal method. Considering the mobility of the uterus, and the non-involvement of the broad ligaments and adjacent viscera and tissues, as far as could be verified by pelvic examination, there was reason to hope that the gravity of the operation would be justified by the great benefits which could be expected only from this method. All the preliminary precautions—thorough disinfection of the parts, &c.—having been attended to, the patient was placed in the lithotomy position, and the lower limbs separated by assistants. A Sims' speculum was passed, the cervix seized with a Vulsellum, and firmly packed with boracic gauze. The mucous membrane was now divided along its anterior and posterior reflections on to the cervix, by means of a scissors, and pushed up to the extent of about one inch, taking care to keep close to the cervical tissue, and clear of the ureters. The patient was now returned to the supine position, and the abdomen opened by a free incision extending from the umbilicus to within a finger's breadth of the pubis. The uterus was seized with a strong Museux forceps, and drawn strongly out of the abdomen. The broad ligaments were now severed between two sets of ligatures, in a line extending through the infundibulo-pelvic ligament, with its ovarian vessels, and the round ligament towards the cervix. An incision was now made across the anterior peritoneal covering of the uterus, a short distance above the vesico-uterine fold, and the peritoneum, which was still luckily free of the disease, carefully detached and turned down. A posterior flap was treated similarly. The uterine arteries were now easily secured by picking them up on an aneurism needle, close to the



MALIGNANT UTERUS, WITH APPENDAGES.
LAID OPEN FROM FRONT.

cervix, and *outside the reflected peritoneum*. This latter procedure I have now adopted in six consecutive hysterectomies, with the utmost satisfaction to myself, there being no hæmorrhage to dim the field of operation, and no damage to, or inclusion of, the ureters. The uterus and appendages were now removed, and the flaps of peritoneum (already referred to) brought together with fine interrupted silk sutures, so that the former site of the broad ligaments and uterus was represented by a line of peritoneal union extending across the pelvis, and marked by many sutures and ligatures. The peritoneal cavity was now carefully washed out, a glass drainage tube inserted, and the abdominal wound closed with deep silver and superficial horsehair sutures.

I must here acknowledge my indebtedness to Dr. Martell, Senior Resident Surgeon, for the notes of after treatment, and also for the skill and attention with which he watched the progress of the case.

For a fortnight, the patient was treated in the special ward for abdominal operation cases. At first she was fed by the rectum, Brand's essence, yolk of egg, &c., being administered, with occasional doses of liq. quin. sed. Fluid was drawn from the tube at frequent intervals; the urine was drawn off by catheter. There was very little of note, the temperature ranged up to 101·8°; the pulse to 116. The discharge became a little offensive, and the cavity was irrigated with boric acid lotion. On March 12th, she was removed to the general ward.

From the 7th till 12th, the temperature was normal in the mornings, and 99·4° in the evenings.

After her removal to the general ward, the temperature again began to rise, and on May 15th, it reached 105·2°. Vaginal examination revealed the fact that the tissues about the orifice of the urethra was the seat of a new malignant growth, which was very exuberant, and secreting pus freely. An attempt was made to remove this, but it proved only partially successful. The temperature still remained high, and the patient began to get weaker and present signs of general infection. Recovery was impossible, and the patient was removed by her friends and taken back to New South Wales on June 24th. Although the second outbreak of the disease appeared to be very virulent, the cicatrix in the roof of the vagina remained perfectly free up till the time of her discharge—fifty-six days after the operation.

The practical conclusions to which I desire to invite attention are—(1) The necessity for an early diagnosis, by the surgeon, of all malignant developments; for if such were more frequently attained, and more promptly acted on, cancers would soon cease to be what they have long been termed by systematic writers—*the opprobrium of surgery*. (2) The benefits that would accrue to humanity from a pronounced general advocacy of those simple rules of life, that would prevent the denaturalisation of our women and lead to prophylaxis. (3) The certainty of diminishing the prevalence, not only of cancer, but of every other special female complaint, by aiming at removal of the causes which among us so impede the sexual organs in the normal discharge of their allotted functions.

Thus will we accomplish in this department of our profession the ideal expressed in the proverb—*Sublata causa tollitur effectus*. Thus may we hope to stem the advancing tide of invalidism amongst the fairer half of our community, and show once more “how Divine a thing a woman may be made.” The uterus and appendages were shown.

At the same meeting, Dr. O'Sullivan showed two specimens of uterine fibro-myoma, successfully removed by hysterectomy; one represented the hard multi-nodular, the other the soft œdematous variety. Concerning these exhibits, he made the following remarks:—

It gives me much pleasure to be able to place before you two specimens which will exemplify, most clearly, the classification of “Fibroids,” so happily inaugurated by Lawson Tait about eight years ago. I shall now shortly contrast the two varieties.

SOFT ŒDEMATOUS.

1. Solitary. No subsidiary growths ever appear, and may be easily enucleated if seen early.

2. Very soft and uniform, often resembling a pregnant uterus; yields abundant serum on incision, and does not bleed.

HARD MULTINODULAR.

1. Multiple, and consists of masses of all sizes, which look as if they got promiscuously entangled in the uterine tissue. Their enucleation is difficult and of no avail.

2. Very dense; yields no serum on incision, but bleeds freely.

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| <p>3. No respector of age, though preferring the old. Grows <i>exogenously</i>, and is entirely independent of menstruation.</p> <p>4. The growth of the tumour is not affected by the "climacteric."</p> <p>5. Excision of appendages proves utterly futile. This demonstrating an exemption from the nerve control which regulates the periodic uterine losses.</p> <p>6. Rarely attended with any undue loss of blood <i>per vaginam</i>.</p> | <p>3. Essentially a disease of menstruation, and is <i>endogenous</i> in its growth.</p> <p>4. It is arrested in growth, and tends to diminish in bulk after the menopause (which it may indefinitely postpone).</p> <p>5. Its growth, and any attendant menorrhagia, or metrorrhagia, are promptly terminated by removal of appendages, and under the age of 40, the tumour generally disappears altogether.</p> <p>6. Often involves exhausting hæmorrhages.</p> |
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One of the most brilliant young gynæcologists of our time, Dr. A. W. Johnstone, after a careful microscopic examination of a soft œdematous myoma, came to the conclusion that it consisted of lymphoid tissue, and was practically "a homologous growth of the adenoid lining;" but he is unsupported in this view.

Lawson Tait, to whose scientific penetration and practical achievement we owe so much, refers the tumour to the non-striated muscular fibre of the part, with its special fusiform cells and rod-shaped nuclei.

It has a distinctive structural peculiarity; its fibres being widely separated in all directions, by cavities filled with serum, and "mush," which is nothing more than broken down effete cells.

The multinodular tumour has its fibres closely packed, and is not honeycombed in structure. These considerations, together with the fact that the soft œdematous myoma is not amenable to removal of appendages, nor under the control of the nerve centres, which regulate the uterine functions, lead me to conclude, having due regard to the evolution of such diseases, that, if we are not here dealing with a truly malignant neoplasm, we are, at least, on the borderland of malignancy. However, be this as it may, there can be no question of the important and marked practical differences between this rather uncommon tumour, and the prevalent simple nodular fibro-myoma of the uterus. It is to be hoped that Mr. Tait, to whom is due the credit of having elucidated the pathology of those neoplasms, and of having demonstrated their

many points of difference, will, at no distant date, complete his achievement by endowing the fatal soft myoma with a distinctive name—a name not shared by a class of tumour comparatively harmless.

The operation which I performed in both those cases, may be shortly described as supra-vaginal amputation, after the manner of Schröder, with ligature of the uterine arteries, and intra-peritoneal treatment of stump. Both patients are now, after an interval of ten months, in perfect health.

DISCUSSION.

Dr. BALLS-HEADLEY said they were much indebted to Dr. O'Sullivan for his paper, and for showing the specimens. The cases spoke for themselves—they were excellent, and the operations were exceedingly well done, and had been successful. As to the causation of cancer, he did not agree with Dr. O'Sullivan. He could not agree that it was a neurosis, that nervous excitability was a cause. Also, if the state of the blood had anything to do with the development of cancer, you would expect frequently to meet with cancer in anæmic girls, but in such cases it practically never occurred. He agreed that patients found to be suffering from malignant disease had generally been in bad health previously, but the cancer almost always, if not always, developed in the site of a former irritation—an old placental attachment, or a granular os; but look at the crowds of such cases in which there was no malignancy. He had never yet seen a case of malignant disease of the cervix uteri where there had not previously been a granular face, and generally a laceration also. If due to the excitable condition of the parts, how was it that malignant growths were not more common on the penis? In men, cancer was commonly found in the lip and tongue, and these men generally were smokers, and thus there was a source of irritation. What the importance of heredity was, it was difficult to say. He could not think that a depressed condition was of much importance, but he thought there was a specific development on an irritated surface. In regard to the infrequency of cancer amongst savages, in them the raw irritated surface was almost never seen. In such cases, great care should be taken to see that the diagnosis was correct. In New York, he had seen a leading

European surgeon remove a uterus, which was subsequently found to contain a small polypus dangling at the inner os. This had been the cause of all the symptoms; the patient died two days afterwards. As regards the fibroids, he thought the symptoms depended very much on the direction of growth; they also varied much in size, according to their condition, and this could be affected by treatment. In certain cases, great relief was obtained by dilating the cervix and curetting, drainage being thus favoured. In reference to the effect of removal of the ovaries in large œdematous growths, many years ago he operated on such a case, with Dr. Rowan's assistance. Now the tumour could scarcely be felt. Drainage did a great deal for such tumours, and in their treatment by electricity there was much passing of sounds, and thus probably drainage was favoured, and so relief was obtained.

Dr. GARDNER asked how the diagnosis of sarcoma had been arrived at, for he felt sure that he would have mistaken the case for one of fibroid, with endometritis, owing to the protruding nodule high up on the posterior wall, and he concluded that a mistake could only be avoided in such a case by curetting, and having the débris examined by a competent pathologist. With regard to the method of operating, viz., the abdomino-vaginal, he was entirely in accord with the reader of the paper, for although he had seen a uterus three or four times that size removed by Péan by the vaginal method, it was performed for fibroid enlargement, and was done *par morcellement*, using specially constructed knives, and cutting away the fibroid till the uterus was reduced to a shell. The clinical distinction of Lawson Tait between soft and hard fibroids was in the majority of instances true. Removal of the ovaries and tubes in the case of the hard fibroids would lead to an arrest of growth, and sometimes to the almost complete disappearance of the growth. Of this, he instanced a case in his own practice, in which no tumour could be felt nine months after an operation for the removal of the ovaries and tubes, although at the time of operation the uterus reached the umbilicus. In regard to the œdematous variety, removal of ovaries and tubes was of no avail, as they continued to grow after the menopause, and the choice lay between palliative treatment and hysterectomy.

Dr. ADAM, while congratulating Dr. O'Sullivan on the results of his cases, thought we were not yet in a position to discuss the causation of cancer. In regard to the malignant case, the most interesting point was the diagnosis. Dr. O'Sullivan said he diagnosed the case from the clinical picture. He thought we should not forget the value of curetting, followed by microscopic examination of removed tissue in such cases. Twelve months ago, he had seen a case that looked very like malignant disease. He curetted, had the tissue examined; it was found not to be malignant, and the patient was now perfectly well.

Dr. ROWAN did not agree with the positive statement, made on the authority of Lawson Tait, that removal of the uterine appendages was useless in soft œdematous myoma. He could show at least a dozen such cases, in which removal of the tubes and ovaries had been perfectly successful. He was doubtful whether removal of the uterine appendages was of any use after the menopause, but before the menopause, the operation benefited all cases, and cured 75 per cent.

Mr. G. A. SYME would like to mention one point in connection with the technique of the operation. That day he had been reading the account of a discussion on hysterectomy. Baer, an American surgeon, recommended a free incision into the broad ligaments, with ligature of the uterine arteries. No sutures were used. He recorded ten cases, all successful.

The President (Professor ALLEN) said that he was not prepared to admit any sharp distinction between the two classes of myomata described by Lawson Tait. Myomata varied greatly in the amount of fluid contained by them. Some were solid and tough throughout, others contained cyst-like spaces, which might be large or small, numerous or isolated. A large solid tumour with a few such spaces, even of great size, differed widely from a growth in which the fasciculi of involuntary muscle were separated by multitudinous small intervals. Some tumours contained islets of spongy consistence. Others again were soft and succulent throughout. But no definite division could be drawn between the hard and the soft varieties, the dry and the œdematous. Both the solitary and the multiple tumours might be hard or soft, tough or cystic. Comparatively tough myomata contained a large quantity of fluid. If a tough cystic myoma is cut in half, and one

part kept in spirit, while the other is hung up in the air to dry, the latter will shrink to a small fraction of its former size. The two kinds of myoma, hard and soft, both display great variations in the character of their encapsulation, being in some cases very sharply defined and easily shelled out, while in other cases they are more intimately connected with the surrounding tissue. The soft myoma, that continued to grow when the uterine appendages were removed, was decidedly rare. Lawson Tait did not quote many cases, and did not speak too clearly about them. In some instances, however, the rate of growth and the clinical features were suggestive of sarcoma, though the structure was purely myomatous. In conclusion, he congratulated Dr. O'Sullivan on the splendid surgical results of the cases submitted, and spoke in high terms of the excellence of the specimens exhibited.

Dr. O'SULLIVAN, in reply, said he was much pleased that his paper had given rise to so animated and interesting a discussion. A practical expression of opinion from a body such as this must always lead to good results, by directing an intelligent curiosity to the etiology of a class of diseases that are largely amenable to prophylaxis. He was sorry that Dr. Balls-Headley had misconstrued the gist of his remarks. Most leading systematic writers, amongst whom may be mentioned Herbert Snow, Walshe, Lobstein, and Sir James Paget, are agreed that depressing neurotic conditions—particularly mental distress—strongly predispose to cancer developments, and considering the directness of the testimony on this point, it surprised him to find that anybody should now question the soundness of the doctrine. The state of the blood had not, *per se*, anything to do with the development of malignancy. The anæmia referred to by Dr. Balls-Headley was an inevitable consequence of the depressed nutrition and defective innervation which naturally followed prolonged mental disquietude, and the many other depressing neurotic conditions already referred to as predisposing factors in the genesis of cancer. He did not say that cancer was in any way directly due to the excitability of a part, but rather that there was a special liability to cancer where the cell elements were prone to frequent modifications, and where these variations were under the direct and intimate control of the nervous system, as in the uterus. Here, constant irritation and devitalising influences of any sort will

work most evil. He quite agreed, that the greatest care must be exercised in order to ensure a correct diagnosis. He would admit the difficulty, in rare instances, of drawing the line between malignancy and benignancy; but he asserted that, in those exceptional cases of uterine cancer involving doubt, it would be infinitely better that the surgeon should; having taken all the necessary precautions, and availed himself of all the means at his disposal to arrive at an accurate decision; err, by performing the major operation promptly, rather than that a woman should, by indecision and bungling delay, be sacrificed to the inevitable general infection of malignancy. Mistaking malignant for non-malignant tumours is constantly occurring in every department of surgery, and we cannot expect to be free from it. He did not deal with the question of heredity of cancer, as it could not possibly be looked on as a *vera causa*. It relates entirely to the transmission, and has nothing to do with the first appearance of the disease. With regard to treatment of "fibroids" by dilating and curetting, he could not agree that any relief was obtained therefrom. He contended that such measures aggravated the evil by causing irritation, increased blood supply, and more rapid growth. "Uterine tinkering" with astringents, electrical currents, curetting, and such minor palliative measures, could not be too strongly condemned. All these systems are annoying and expensive to a patient, far more dangerous than a radical operation, and never attended with permanent results. With regard to the statement of Dr. Rowan, that he found removal of appendages perfectly successful in soft œdematous myoma, such was not the experience of the advanced school of gynæcologists of the present day. He (Dr. O'Sullivan) could not help thinking that Dr. Rowan mistook the hard nodular tumour, undergoing some degenerative change, as it frequently does, for the soft œdematous growth of pathology. Œdema is a frequent cause of such softening in those tumours, and they are often the seat of fatty, amyloid, myxomatous, cystic, and other degenerations; but this condition of things must not be mistaken for the soft special variety of tumour referred to, which is only amenable to enucleation or hysterectomy. In reply to Dr. Adam, he would say that his patient had already been curetted twice by a leading surgeon in the country, her cervix was open, and the

endometrium easily accessible to examination. He would conclude by saying, in reply to Professor Allen, that not only were the naked eye and microscopic appearances of the soft œdematous and hard multinodular tumours different, but their pathological and clinical characters were totally distinct.

CASES.

MULTIPLE FIBRO-MYOMA OF UTERUS— HYSTERECTOMY—CURE.

[Read before the Victorian Branch of the British Medical Association.]

Before going into the details of this case, I will venture to trespass a little on your patience, by touching, lightly, on the scientific terms involved; and I would fain invite your discussion of a few interesting points, in the direction of etiology and prophylaxis.

The pathological nomenclature, and classification, of non-malignant tumours of the uterus are still, generally speaking, as erroneous and confusing as they can be, notwithstanding the efforts of recent histologists to expose past fallacies. The familiar terms fibroma and myoma, as applied to uterine tumours, are objectionable, because they do not convey to the mind an accurate and comprehensive idea of the neoplastic growths to which they are applied; because they do not indicate their common and pathological significance. The term fibroid, or fibre-like, is only applicable to a tumour composed entirely of fibrous tissue, and always situated in connective tissue; but the so-called uterine fibroid contains a variable quantity of muscular, as well as fibrous tissue, both of which are derived from the parenchyma of the uterine wall in which the tumour grows.

Virchow proposed that these tumours should be called myomata, because of the presence of muscular tissue ; but it is self-evident, that this is as objectionable as the term fibroma. Both terms should be discontinued, and I look on it as the duty of every member of the profession to assist in blotting out such inaccuracies, and thereby to promote a most desirable reform. While admitting the difficulty of assigning to tumours their exact place in a purely histological classification, and while recognising the great variety of cell elements, and the equally great variety in the distribution and arrangements of those elements found in uterine tumours, pathologists now agree that the term fibro-myoma, or myo-fibroma, is the only one that fully designates those solid growths. The same strictures will apply to the ordinary classification of such growths. The terms sub-mucous, interstitial, and sub-peritoneal, are, as a means of accurate differentiation, embarrassing and worthless. We generally find that the multiple fibro-myoma—the multinodular tumour of Lawson Tait—is all three, as in the specimen which I have the pleasure of placing before you this evening ; it is at once sub-mucous, interstitial, and sub-peritoneal. It consists of dense nodular masses, almost cartilaginous, of different sizes, which seem to be intimately entangled in the stroma of the uterine tissue. This condition would appear to be a disease of the “fundus,” as there are few, if any, authenticated cases of fibro-myoma affecting the cervix. Sections treated with dilute acetic acid, and carefully stained with nitrate of silver, displayed very clearly the characteristic rod-shaped nuclei.

May I briefly call your attention to some striking phenomena, which I have often thought show a strong analogy to cancer development, and would seem, like it, to be an heritage of civilised life.

The uterus, like the breast, may be distinguished pathologically from almost all other organs of the body by its remarkable proneness to what may be called trophic tumour formations, or disturbances of nutrition. The fibro-myoma of the middle-aged woman, and the mammary fibroma of adolescence, consist histologically of redundant normal tissue, and are more or less apt to disappear spontaneously—a characteristic unknown in the case of any other tumour.

Permanently benign, perhaps in most instances, each seems to be but the product of overgrowth—a local perversion of natural development. One of the greatest gynæcologists of our time has quoted in the introduction to his work a pithy and expressive French aphorism, "*La femme est une malade.*" Is this the natural condition of our kind, and what are the reasons for this melancholy assertion? Very little investigation is required to show that this is not woman's normal state, and that the phrase can be applied to her only when she is placed amongst the artificial and enervating surroundings of modern civilisation.

Amongst savage races, so far as we can ascertain, organic disease was rare, the majority of their complaints ranking as zymotic. Lawson Tait says, "The proof that such diseases are spreading is given by the fact that fibro-myoma, unknown among the savage women of Africa, has become a very scourge among their descendants of the Southern States, whose habits of living have been somewhat assimilated to those of Europeans."

Snow says:—"There is reason to believe that uterine myoma was extremely rare in the Middle Ages; and of the existence of mammary fibroma in the young savage woman, I have been unable, after diligent search, to find any evidence at all. From long continued observation, I feel amply warranted in assuming, that uterine fibro-myoma and mammary fibroma of adolescence are, like carcinoma, of which the female sexual organs form the special realm, to all intents and purposes products of a civilised state."

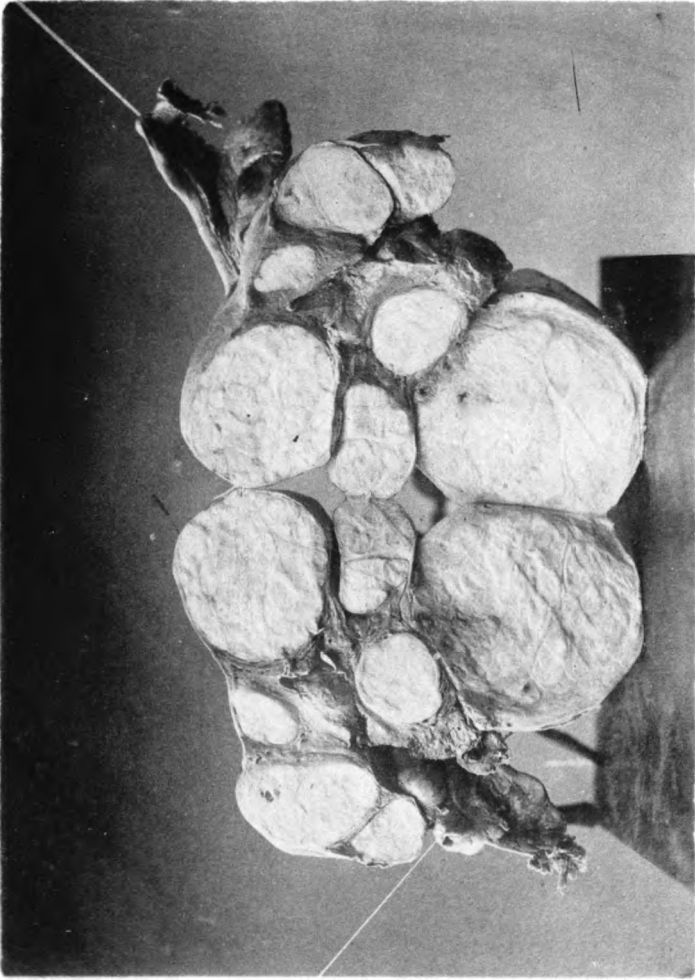
History.—C. D., æt. 37, native of Ireland, first came to Australia fourteen years ago. The early history of menstruation is uncertain, but up till the age of 28 years, when she married, the patient enjoyed good health, and her menstruation was fairly normal. For four years prior to marriage she had been employed as a laundress, and had, necessarily, a good deal of heavy work to do. Soon after marriage, nine years ago, she complained of pain in the left side of lower abdomen. This pain increased, and gradually extended into the right side. Abdominal pain has been almost continuous during the past nine years, but it has varied in character and intensity, being at first acute, and latterly dull and aching. The patient has never been pregnant; menstruation has been quite regular, at intervals of four weeks.

The flow has lasted from three to six days ; the quantity has been rather profuse, and has always been attended with great pain. Her family history is not particularly interesting. Both parents lived to more than seventy years. One brother died of cancer. She has three married sisters, each of whom has had a family. The patient herself had typhoid in the Melbourne Hospital two and a half years ago, when, for the first time, an abdominal tumour was discovered. At that time it was very small, and the growth was for eighteen months after very slow. During the past year, however, it has increased very rapidly. Together with the increase in size, there has been much more pain, and micturition has frequently been painful and difficult. At first, the tumour was apparently confined to the left side, the swelling on the right side having attracted attention only five or six months ago.

The patient was admitted to the Women's Hospital on March 7, 1892. She was strong, and appeared to be in good health. On examination, her chief organs—heart, lungs, kidneys, &c.—were found to be normal. The abdomen was distended with a hard solid tumour, which occupied its lower part, and was particularly prominent in the left side. The tumour presented numerous hard bosses, and was somewhat tender on manipulation. On vaginal examination, almost the whole of the pelvis was occupied by the hard mass, which was, without much difficulty, diagnosed as consisting of multiple uterine fibro-myomata. The cavity of the uterus measured about one and a half inches. After consultation with the other members of the honorary staff, it was decided to remove the tumour. The patient was kept in bed up to the time of operation, on March 24th. She was kept on slop diet during this time, and the functions of the bowels and kidneys were carefully regulated.

The operation which I performed in this case may be shortly summarised as supra-vaginal amputation, with ligation of uterine arteries and intra-peritoneal treatment of the stump (Schroeder).

I opened the abdominal cavity by a free incision, extending from above the pubis to an inch and a half above the umbilicus, excising the umbilical tissues. Having turned out the tumour, I severed the appendages by doubly ligating the infundibulo-pelvic ligament with its ovarian vessels,



CORONAL SECTION OF TUMOUR AND UTERUS

and the round ligament in several pieces, and dividing them between those two sets of ligatures; so the uterus and tumour were separated from their lateral connections without hæmorrhage. I now found it necessary to enucleate part of the tumour from the cellular tissue, between the folds of the broad ligament on the left side—a proceeding not unattended with difficulty—and afterwards passed a temporary elastic ligature around its base. Then an incision was made across the anterior peritoneal covering of the uterus, a short distance above the vesico-uterine fold, and a flap of peritoneum detached and turned down. A posterior flap was treated similarly, and the peritoneum covering the cervix laterally was easily separated for about half an inch on either side. I now secured the uterine arteries by picking them up on an aneurism needle, passed close to the cervix *and outside the reflected peritoneum*. In this manœuvre, we have to deal with the most important point in the performance of hysterectomy—the avoidance of damage to, or inclusion of, the ureters. The uterus and tumour were now cut away, about on a level with the inner os, and the temporary elastic ligature removed. The stump was dressed by removing a wedge-shaped fragment from upper aspect of cervix. The cervical canal was disinfected with a strong solution of carbolic acid, and the cut surfaces brought together with a deep continuous catgut suture. The flaps of peritoneum (already mentioned) were now brought together over the stump with fine interrupted silk sutures. Breaches in the peritoneum at either side were united, so that the former site of the broad ligaments and uterus had a covering of peritoneum, and was represented by a line of union passing across the pelvis, and marked only by many sutures and ligatures. The pelvic cavity was now carefully cleansed, a glass drainage tube inserted, and the abdominal wound closed with deep silver and superficial horse-hair sutures.

I must express my indebtedness to the Senior Resident Surgeon, Dr. Martell, for the following notes of the after-treatment, as also for the attention and skill with which he watched the case.

The points which I wish, more particularly, to emphasise are :—
 (1) The free abdominal incision, and excision of umbilical tissues. There still seems a disposition to manipulate through a small

wound, thereby increasing, very materially, the risks of abdominal surgery. When it is found necessary to extend the incision through the umbilical tissues, their excision will give a much firmer wound, and less liability to subsequent hernia. (2) Multiple ligature of the broad ligaments, thereby preventing dragging on the tissues, and the pain incidental thereto, &c. (3) Intra-peritoneal treatment of the pedicle. This procedure may be now said to have superseded the extra-peritoneal method altogether. It is admittedly the more rational and scientific operation of the two, the chief difficulty of its early history—hæmorrhage—being obviated, by securing the arteries and veins of the normal uterus. (4) Ligature of the uterine and ovarian arteries. This is a point of some importance in anæmic subjects, as patients suffering from tumours generally are, and it absolutely removes all danger of our quondam enemy—hæmorrhage—either immediate or secondary.

In conclusion, I may be allowed to venture the opinion that, in all cases where the tumour cannot be removed without the uterus, the operation of the future will be extirpation of the whole organ, thereby avoiding any tinkering with pedicle.

After-Treatment.—Patient was removed from the operating room to the special ward at 5.40 p.m. At 7 p.m.—The temperature was 99.6°; pulse, 80; respirations, 25. She seemed to be in a good deal of pain, and 2 oz. of bright red fluid were drawn from the drainage tube. At 8 p.m.—One oz. of fluid was drawn from the tube, and a zymised meat suppository given. At 9 p.m.—Two drs. of fluid were drawn from the tube. At 11 p.m.—Catheter was passed, and 5 oz. of urine drawn. At 12 p.m.—Was much troubled with hiccough, and a nutrient enema of peptonised milk, with $\frac{1}{2}$ oz. of brandy was administered; fluid drawn from tube, 1 dr., still bright red; temperature, 100°; pulse, 120; respirations, 37.

March 25.—At 6 a.m.—Has only dozed for a few minutes during the night; had a good deal of pain, and is complaining greatly of thirst. Was given warm water, 1 dr., with 10 drops of brandy, every half hour. Catheter was passed, urine 8 oz.; fluid from tube, 1 dr., lighter in colour. Passed flatus through rectal tube. Hiccough very troublesome. Temperature, 99.2°; pulse, 110; respirations, 34. At 12 noon.—Zymised suppository given. Catheter passed, urine 10 oz.; fluid drawn from tube

2 drs., clearer, with small clots. A little ice given to suck occasionally. Mustard leaf applied to epigastrium. Hiccough much better. Brand's essence, 1 dr., with soda water and peptonised milk, 1 oz., every two hours, was given by mouth. Vomited twice during the morning. Temperature at noon, 99.6°; pulse, 94; respirations, 30. At 6 p.m.—Temperature, 100.4°; respirations, 35; pulse, 100. At 12 p.m.—Temperature, 98.6°; respirations, 28; pulse, 90.

March 26.—Morning.—Temperature, 99.6°; respirations, 34; pulse, 100. Evening.—Temperature, 101.2°; respirations, 34; pulse, 100. Was fed regularly by rectum, and occasionally by the mouth. Bowels washed out twice. Remains of food very offensive. Has suffered a good deal of pain, due to flatus; much relieved on passage of rectal tube. Fluid drawn from the tube three times during the day, rather more in quantity than yesterday.

March 27.—At 6 a.m.—Temperature, 98.2°; pulse, 80. At 6 p.m.—Temperature, 98.6°; pulse, 104. Castor oil given this morning. Bowels not open at 4 p.m. Pil. col. et hyos. given.

March 28.—Morning.—Temperature, 99°. Evening.—Temperature, 100.4°. Bowels opened. Feels well. Is taking nourishment freely.

March 29.—Morning.—Temperature, 99.4°. Evening.—Temperature, 100.4°. Six wire and six horsehair sutures removed to-day. Wound is looking well.

March 30.—Two more silver wire sutures removed. Cavity washed out and wound dressed twice daily.

March 31.—Last six horsehair and four silver sutures removed. Glass tube removed and india-rubber one substituted.

April 1.—Is taking light solid food—tripe, bread and butter, &c.

April 2.—Passed a little pus in motion to-day. Ordered hot vaginal douche twice daily.

April 5.—Large rubber tube removed and small one inserted. Aperture filling up rapidly.

Patient was removed to the general ward on April 7. From March 29 till time of removal, the temperature varied between normal and 101.8°. It reached its maximum on two occasions, viz., the evenings of April 1 and 2, just before the pus was

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detected in the stool. She got up on April 23, and was discharged from the hospital on May 3. During the latter part of her stay in the hospital, she was greatly troubled with constipation, and it was necessary to administer an aperient (cascara) almost daily. At the time of her discharge she was quite well. Complained only of occasional slight pain.

DISCUSSION.

Dr. SPRINGTHORPE said that there was no question as to the exceedingly interesting nature of the case, because it represented a very successful operation. He regretted more gynecologists were not present to discuss it.

Mr. SYME could not discuss the paper as a gynecologist, but the pathological questions raised were of interest. With reference to the classification of uterine fibroids into three forms, the fact seemed to be that they were primarily interstitial, and then grew to the mucous or peritoneal surfaces, or to both—it was an arbitrary classification, but perhaps, not without use in regard to treatment; sub-mucous and sub-peritoneal growths might often be enucleated, but in interstitial growths, hysterectomy must be performed. He thought, however, it must be very difficult in diagnosis to exclude the existence of interstitial growths. The operative procedures for such cases, and the opinions regarding them, are numerous. Should the whole uterus be removed, or should it be amputated above the cervix, as in the present case? Then, should the stump be treated by the extra- or intra-peritoneal method? He congratulated Dr. O'Sullivan heartily on his methods and results. Most scientific surgeons hold that the intra-peritoneal treatment of the stump is the ideal method, and Dr. O'Sullivan, in this case, added another instance to show that it might be so treated without risk and with advantage. The stripping of the peritoneum, so as to ligature the uterine arteries extra-peritoneally, and avoid the danger (which was very great) of including the ureters in the ligature, was very commendable. This form of disease was undoubtedly increasing, and it did appear to be an attribute of advancing civilization. So also did carcinoma, but there could hardly be much analogy between such different diseases. He congratulated Dr. O'Sullivan on the manner in which he had brought

forward good matter for discussion, in amplification of the mere record of cases.

Dr. McADAM thought Dr. O'Sullivan was to be congratulated on a triumph in surgery. Dr. O'Sullivan struck the true note when he said it was necessary to discuss the factors that cause these diseases. He did not profess to know them, but would like to hear Dr. O'Sullivan's views, as prophylaxis was our ideal. How did it happen in many cases of uterine fibro-myomata, that the symptoms were latent, even though the growths were of large size? In reading a paper by Sir James Simpson, he noted the finding of a specimen 14 lbs. in weight, which was only discovered post-mortem. There were no symptoms during life, save enlargement of the lower abdomen. Why was pain present in some of these cases and not in others? There were other methods of treatment sometimes used before resort was had to the drastic method of operation. He might instance the hypodermic use of ergotinin, and Apostoli's treatment. What was Dr. O'Sullivan's opinion of these methods?

Dr. NIMILL thanked Dr. O'Sullivan for his reports of this and previous cases. The malignant one was singular, in that such a condition should occur in so young a subject. He thought the records of this case should be published far and wide, so as to show the necessity for a thorough physical examination in the initial stages of such affections, with a view to prompt and effective treatment.

Dr. O'SULLIVAN, in replying, said that there was no department of surgery in which there was a larger field for the exercise of a sound judgment, than in female surgery. There was now no doubt as to the superiority of the intra-peritoneal method of treating the stump. The extra-peritoneal method was fast becoming obsolete, all reliable statistics were against it, and it was irrational in itself, because by its use there must be a drag on all the tissues, a danger of secondary hæmorrhage, a large sloughing mass in the wound, an encroachment upon the capacity of the bladder, a prolonged convalescence, and it created a potential bowel trap, to menace the patient's future health and existence. In the intra-peritoneal method there was a simple line of peritoneal wound, and the abdominal wound could be completely closed. It was always advisable to take the precaution of first tying the

uterine and ovarian arteries. The field of operation was not then obscured by hæmorrhage, and everything was easily seen. The ureters were commonly about half an inch outside the cervix, but in these cases the true anatomical relations were often much disturbed, and there was great fear and danger of their inclusion in the ligature, the case thereby being rendered hopeless. The non-malignant forms were functional disturbances in the beginning, and did not assume a pathological aspect until later on. Tait said they commenced as vascular disturbances, and thence resulted hypertrophies and developments. It would not be fair to ask him to decide on the merits of Apostoli's treatment, when such men as Lawson Tait and Keith were at loggerheads over it. Tait had gone so far as to say, that his consulting rooms were flooded by the failures of Keith in using this method. He might summarise the chief points in hysterectomy as follows :—(1) The propriety of tying the uterine and ovarian arteries first, and the necessity for avoiding the ureters. (2) A *free* abdominal incision—a small wound was a fallacy. Treves said a free incision was better than a small wound with contused edges. He excised the umbilical tissues. He always had union by first intention within two or three days.

SOFT OEDEMATOUS MYOMA OF UTERUS— HYSTERECTOMY.

M. McM., æt. 47 years, servant, single, was admitted into the Women's Hospital. She was very thin and weak, and appeared to be not altogether sane. No very reliable history could be obtained from her previous to operation, but subsequently her mental condition had so much improved, that she was able to give a perfectly reliable account of herself. She was born in Ireland, and first menstruated at sixteen years of age, soon after her arrival in this colony. She has always been quite regular, at intervals of three to four weeks, and until recently has had no pain. The loss, which was at first scanty, had very much increased during the past three years, and latterly was very great indeed,

the flow lasting usually for eight to ten days, and during the first three days of each period always amounting to a "flooding."

On admission, she complained of great weakness, and a sense of great weight in the abdomen. She had noticed a gradually increasing swelling of the abdomen during the past six years, but this she attributed to "wind." Fifteen months ago, she was for three weeks in the hospital, when her case was considered one not suitable for operation. Three months ago, she was an in-patient of the Melbourne Hospital, where she was treated for "swelling of the legs."

On examination, the heart, lungs, and kidneys were found to be fairly healthy; the abdomen was very greatly distended with an apparently solid tumour, which was freely movable, and extended from the pubes to about two inches below the ensiform cartilage. On vaginal examination, the tumour was found to occupy almost the whole of the pelvis, and was particularly prominent in front. The cervix was dragged up under the pubic arch; the sound passed eight and a half inches directly backwards. It was decided to perform abdominal hysterectomy.

The operation performed here was exactly the same as the last. The tumour, which weighed seventeen pounds, was removed (with the uterus) by supra-vaginal amputation, and the stump treated intra-peritoneally.

Patient removed to special ward 5.40 p.m. 6 p.m.—3 x hot water injected into rectum. 6.30 p.m.—Fluid drawn off from tube 3 vi, dark red in colour. Temperature 99°, pulse 90, respirations 28. 7.30 p.m.—Fluid from tube 3 j. 8 p.m.—Catheter passed urine 3 iij. Zyminised suppository given. Fluid from tube 3 ss., bright red. 11 p.m.—Nutrient enema of peptonised milk and brandy given. Fluid from tube less, and paler in color. 12 midnight.—Catheter passed urine 3 vij. Fluid from tube 3 iij.

July 22.—3 a.m.—Zyminised suppository given. Patient is very restless. 4 a.m.—Catheter passed urine 3 xij. Fluid from tube 3 ij. Has been dozing frequently for a few minutes, at other times has been very restless. 6 a.m.—Fluid from tube 3 ij. Temperature 100.6°, pulse 104, respirations 22. 7 a.m.—Rectal tube passed, good deal of flatus; injected two pints of warm water into the bowel, which was in part retained. 8 a.m.—Catheter passed urine 3 v. Fluid has been drawn from tube

every two hours, it is getting less each time, and is lighter in color. Is being fed by rectum every three hours. 12 noon.—Urine ζ v. Temperature 99.8° , pulse 106. 6 p.m.—Fluid from tube much less, urine ζ vi. Temperature 99.2° , pulse 108.

July 23.—6 a.m.—Slept between four and five hours. Has had peptonised milk by the mouth (ζ ss.) every hour. Urine ζ xv during last twelve hours. 9.30.—Passed urine and flatus naturally, enemata discontinued. Taking milk and soup by mouth. Temperature 100.2° , pulse 108. 6 p.m.—Temperature 100.8° , pulse 102.

July 24.—Temperature—morning 99.6° , evening 100.2° . Patient was very restless and excitable during the night, and refused to take any food. Was fed again by the bowel. A sedative draught (chloral hydrat. gr. xx, potass. bromid. gr. xx) given this morning. Patient was much quieter during the day. Bromid. and chloral repeated in the evening.

July 25.—Slept about six hours, and has taken nourishment again by the mouth. Temperature—morning 99° , evening 99.6° .

July 26.—Has been very restless and discontented all night. Bowels moved after aperient. Wound dressed; two silver sutures and nine horsehair sutures removed. Glass tube removed and a rubber one inserted. One suture has broken, and has disappeared into the abdominal wall. Temperature—morning 98.6° , evening 99.8° .

July 27.—Slept between five and six hours. Seems very strange this morning. Has numerous delusions, and has attempted to assault the nurse. Wound dressed. One suture removed; the broken one is still missing. Temperature—morning 99° , evening 101.6° . Bromide and chloral draught given at 11 a.m. and 7 p.m.

July 28.—Slept about seven hours. Still has delusions. Bromide and chloral given by rectum, and pil hyoscine by mouth. Four silver sutures removed. Temperature—morning 100.4° , evening 100.6° .

July 29.—Slept well, only waking occasionally for a drink. Wound dressed; last four sutures removed. Is taking food well. Temperature 100° and 100.4° .

July 31.—Is much quieter, has no delusions, but is still a little queer. Removed to general ward. Temperature—morning 99.2° , evening 99.4° .

After removal to the general ward, patient did fairly well for three days, when temperature rose to 102°. This was due to the formation of an abscess just under the abdominal wall. Abscess discharged freely on August 6, and temperature became normal. The rubber tube was removed on August 14. Patient got up on August 19, and was discharged from the hospital August 31. She has very much improved, both mentally and bodily, and is quite free from pain and discomfort.

PAPILLOMATOUS CYST OF RIGHT BROAD LIGAMENT, NECESSITATING HYSTERECTOMY.

M. E., aged 38 years, married, was admitted to the Women's Hospital. Patient complained of a swelling of the abdomen, which interfered very greatly with respiration and locomotion. She stated that she was quite well up till eighteen months before admission, when she first felt a dragging pain in the right side. Nine months later, she noticed a swelling in the right side of the lower abdomen; this swelling increased in size very rapidly, and caused great dyspnoea, and interference with ordinary household duties. Patient was married twenty-one years ago, and has one child 20 years of age. Her catamenia were regular every four weeks, lasted seven days, and were extremely painful and profuse.

On examination, patient presented an unhealthy appearance; the abdomen was greatly distended, and occupied by a large tumour. There was marked dulness in front, and resonance in both flanks. The tumour was very tense and cystic in nature. On vaginal examination, there was a distinct wave on double palpation, the cervix uteri was drawn upwards behind the symphysis pubis, and the fundus uteri was retroflexed.

After consultation with the other members of the staff, I decided to attempt removal of the tumour by abdominal section. The patient was prepared for operation in the usual manner, and

anæsthetised. I made the usual median incision about three inches in length, and at once came down upon the tumour. It proved to be a papillomatous cyst of the right broad ligament, and had insinuated itself between the layers of that structure in such a manner as to lift the whole of the peritoneum from the posterior surface of the uterus. By aspiration, eleven pints of fluid were drawn off. On account of the relation of the tumour to the posterior surface of the uterus, it was quite impossible to remove the sac alone, I determined therefore to perform hysterectomy. After enlarging the abdominal incision, I ligatured the sac about an inch and a half from the uterus, and to get as much room as possible, removed the portion above the ligature. I then ligatured in sections the broad ligament on both sides, being careful to include in the last ligature of each side its corresponding uterine artery. I then placed an elastic tourniquet around the cervix, just below the level of the internal os. After stripping down the peritoneum from the anterior aspect of the lower portion of the fundus uteri, I removed the uterus at the level of the internal os. A wedge-shaped piece of the cervix was then removed, and the cervical canal rendered aseptic by means of pure carbolic acid, applied on cotton wool on a Playfair's probe. The upper surfaces of the cervix were then brought together with three rows of sutures. With the last row of which I was careful to adapt the flap of peritoneum as accurately as possible over the upper portion of what remained of the cervix. After removal of the tourniquet, there was no hæmorrhage. I inserted a glass drainage tube, and closed the abdominal wound in the usual manner.

After the operation, the patient appeared to be fairly well. At the end of the first twelve hours, the temperature was 100.8° , pulse 88, respirations 26. During the first fifteen days, the temperature ranged between 100° and 102.8° . The sutures were removed nine days after operation, the abdominal wound having healed by first intention, except at the angle where the glass tube was inserted. After the first two weeks, as the temperature did not fall much below 100° , quinine in 5-grain doses every four hours was given. Under this treatment the temperature fell to 99° , and continued at that for some days, when it became normal. Patient, however, made little or no progress; her urine had all

along been of low specific gravity, and had contained traces of albumen. Unfortunately, symptoms of uræmia gradually developed, and patient eventually succumbed to chronic Bright's disease exactly three months after operation. A post-mortem examination by the honorary pathologist revealed two very atrophic cirrhotic kidneys—one (the left) being only about the size of an ordinary walnut.

HARD MULTI-NODULAR FIBRO-MYOMA OF UTERUS—HYSTERECTOMY.

Mrs. H., æt. 37, married, was admitted to St. Vincent's Hospital (private ward). She complained of severe abdominal and lumbar pains, frequency of micturition, tenesmus, and marked general debility. Menstruation was very profuse, lasting about ten days, and all her symptoms became more prominent at this time. On bimanual palpation, I found a large nodular uneven tumour filling the pelvis, and extending upwards above the umbilicus; a hard boss projecting downwards into Douglas' space, and displacing the uterus towards the pubis. The sound passed six inches. There was no doubt as to diagnosis.

After due attention had been given to the patient's general condition, more particularly her bowel and kidney functions, I performed supra-vaginal hysterectomy, according to Schröder's method, with extirpation of the adnexa. I opened the abdomen quickly through the linea alba, by a free incision extending from above the umbilicus to within an inch of the pubis, paying no attention to bleeding points. The tumour was now firmly grasped with a large prehension forceps, and carefully drawn through the abdominal wound. The broad ligaments were now divided between two sets of ligatures, on a line extending through the infundibulo-pelvic, and round ligaments, towards the internal os. The uterus with adnexæ and tumour being not quite free from their surrounding attachments, and the connections of the bladder with the tumour having been determined with a sound, I applied

the temporary elastic clamp. The remainder of the operation was substantially the same as I have already described in previous cases. A Keith's drainage tube was inserted. The patient was treated in the usual way. Nutrient enemata for two days at intervals of five or six hours, allowing only small sips of toast-water by mouth.

At end of second day, gave my usual alterative doses of calomel, gr. j hourly, for six consecutive hours, followed by 3j doses of mag. sulph. every two hours, until bowels were freely evacuated. The patient's temperature never exceeded 100°.

The drainage tube was removed on the third, and the abdominal sutures on the eighth day.

The patient left the hospital four weeks after the operation in perfect health.

HYDATID OF LIVER—HEPATOTOMY.

K. D., aged 24 years, married, was admitted to the Women's Hospital. Patient stated that she had enjoyed excellent health up till eighteen months before admission, when she noticed a swelling in the right side, just below the ribs.

On admission, she complained of pain and tenderness in the right hepatic region. The pain was of a dragging and aching character, and was worse when walking and during exercise.

On examination, the abdomen was normal in appearance, except in the right hepatic region, where it was somewhat distended. On deep palpation in this region, which was abnormally dull on percussion, an indistinct sense of fluctuation could be felt. As patient came from the northern part of Victoria, where domestic animals frequently have access to the drinking water, the presence of a hydatid cyst was suspected. An exploratory puncture with a fine aspirating needle confirmed this opinion, and I decided to treat the cyst by incision and drainage.

I made a free incision through the abdominal wall, over the site of the tumour. The incision was about three and a half

inches in length, and extended obliquely downwards and outwards along the margins of the eighth and ninth ribs on the right side. The anterior portion of the cyst was situated deeply in the liver tissue, and the posterior portion of the cyst, which bulged from the under surface of the right lobe of the liver, was situated too far back to allow of its being brought to the abdominal wound. I therefore, after placing two large flat sponges under the abdominal wall, incised the liver, and came down on to the sac. There was some free bleeding from the liver, but it was easily controlled by hot sponges pressed into the wound. I then made a free incision into the sac, and discharged its contents through the abdominal wound. The edges of the sac were then drawn up and sutured with catgut to the margins of the abdominal wound, the flat sponges having been previously removed. A large drainage tube was inserted, and the wound dressed with boric acid. During the operation, nothing was allowed to escape into the abdominal cavity.

For the next twenty-four hours, patient suffered a good deal of pain, and her temperature rose to 101°. On the second day the rash, so frequently seen after puncture of hydatid cysts, appeared over almost the whole of the body. The temperature continued high (about 101°) for a day or two, but there was no peritonitis, except a little localised about the edges of the wound. On the morning of the second day, the dressings were soaked with bile-stained fluid, which was apparently due to the fact that, in incising the liver substance, a good sized bile duct had been cut through. This discharge of bile continued for about ten weeks, and although very large quantities passed through the abdominal wound daily, the stools were always natural in appearance, and the patient's general health was excellent. The sac cavity was daily irrigated with weak solutions of tincture of iodine, and in order to lessen the escape of bile, was continually plugged with iodoform gauze. The cavity gradually granulated up, and the discharge of bile only ceased on closure of the abdominal wound. Patient was discharged from the hospital on July 16, and six months after operation, was reported to be in excellent health.

HARD MULTINODULAR FIBRO-MYOMA OF UTERUS —SALPINGO-OOPHORECTOMY.

K. B., aged 32 years, married, was admitted to the Women's Hospital. Patient stated that she was quite well up till four years before admission, when she had a severe flooding. At each menstrual period she has lost a very great deal, and has suffered almost intolerable pain. About two years before admission, she began to feel a nasty dragging pain in the lower part of the abdomen, and this has continued up till the present.

On admission, she was very weak and anæmic. She complained of great pain and tenderness in the left iliac region. On examination, the abdomen was fairly resonant in both flanks, but somewhat duller than normal in the hypogastric region. On vaginal examination, the uterus was felt to be distinctly enlarged, especially towards the left side; it was also very tender. The sound passed three and a half inches, and its passage caused some little hæmorrhage. The case was evidently one of uterine fibroid, and I determined to remove the uterine appendages.

The operation was performed on November 16. The patient had a rapid convalescence, and left the hospital quite well on December 28. With the exception of a little metrostaxis on the third day after operation, there has been no loss of blood from the uterus. The patient has reported herself twice since operation, and with the exception of a few slight nervous symptoms, due to her induced menopause, is enjoying excellent health. The tumour was found, on her last visit, to have entirely disappeared.

PAR-OVARIAN CYST—ABDOMINAL SECTION.

Mrs. K., æt. 36 years, was admitted to the private hospital on January 9, 1893. She had been under treatment in the country for a considerable time. On her first visit to my consulting room, she complained of a dull aching pain, and a feeling of weight in the lower part of the abdomen. This had been gradually getting worse for some time, and was most severe after walking or other exercise. Except for the pain and sense of weight in the abdomen,

she has been in fairly good health. She has had five children, the last four years ago. Menstruation has been regular, but painful and scanty.

On examination, a fluctuating tumour, fairly movable, could be felt in the region of the right broad ligament. The uterus and the left appendages were apparently healthy. The tumour was evidently an ovarian of the right ovary, or a par-ovarian cyst of the right broad ligament, and I decided on its early removal.

After her admission to the private hospital, she was kept in bed, and the bowel and kidney functions regulated for a week.

On January 16, I performed abdominal section. On opening the abdominal cavity, the tumour, which was about the size of an emu's egg, proved to be a thin-walled par-ovarian cyst of the right broad ligament. It was tapped with a small trocar, about a pint of greenish fluid being obtained. After ligation of the pedicle with the ordinary interlocking ligature, I removed the cyst. The left appendages appeared to be quite healthy, and were not removed. The abdominal wound was closed with silkworm-gut sutures, and no drain tube was inserted. The sutures were removed twelve days after operation, and patient, who made an uninterrupted recovery, left the hospital on February 20, five weeks after operation. She has since enjoyed excellent health.

MULTILOCLAR OVARIAN CYST—OVARİOTOMY.

Miss M., æt. 18 years, first consulted me early in February. She complained of great swelling of the abdomen, which had lately been rapidly increasing, and causing her a good deal of pain and discomfort.

On examination, the abdomen was found to be very considerably distended; it was dull on percussion in the mid-line, from the pubes to the ensiform cartilage, and was distinctly resonant in the flanks. An indistinct sense of fluctuation could be felt on palpation. On vaginal examination, the whole of the pelvis was found to be occupied with a tumour, and bi-manually, distinct fluctuation could be made out. I decided that it was a case for

immediate removal of the tumour, and patient went into the private hospital on February 10.

On opening the abdominal cavity, it was found to be occupied with an immense multilocular ovarian cyst. The larger of the cysts were evacuated in the usual way by aspiration, and none of the contents were allowed to escape into the abdominal cavity. It was necessary to enlarge the abdominal incision very considerably to admit of the delivery of the tumour. After its delivery, and before ligaturing the pedicle, the abdominal wound was closed in its upper extent, to prevent the escape of the intestines. The pedicle was very broad, and was ligatured in sections with the usual interlocking ligatures. The ovary of the other side was somewhat enlarged and cystic, and I decided to remove the appendages of that side also. During the operation, no cyst contents escaped into the abdominal cavity, so that both the peritoneal toilet and the drain tube were considered unnecessary. The abdominal wound was closed with alternate sutures of silver wire and silkworm-gut. Patient made an excellent recovery, her temperature never rising above a 100°. The sutures were removed twelve days after operation, and she left the hospital on March 20, less than six weeks after admission.

HARD MULTINODULAR FIBRO-MYOMA OF UTERUS —HYSTERECTOMY.

A. T., aged 41 years, married, was admitted to the Women's Hospital. Patient complained of a large swelling of the abdomen, which caused her great pain and inconvenience. She stated that she was quite well up till six months before admission, when she began to suffer from severe and frequent floodings. Three months later, she noticed for the first time that her abdomen was enlarged. This enlargement has been increasing very rapidly, and she, for two months previous to admission, has been becoming greatly emaciated. She has been married thirteen months, and has never been pregnant. Menstruation has been very irregular and profuse, and attended with great pain.

On examination, the abdomen is distended irregularly. By palpation, a hard multinodular tumour can be felt occupying the hypogastric and left iliac regions. On vaginal examination, the cervix uteri is found to be drawn up and shortened; the fundus, which is greatly enlarged, occupies the whole of the pelvis. The sound was passed four and a half inches.

After consultation with the other members of the Staff, I decided to remove the uterine appendages if possible, and failing this, to perform hysterectomy. The patient having been prepared in the usual manner, and anæsthetised, I opened the abdominal cavity with the usual incision. A large multinodular fibroid at once presented itself, but the uterine appendages were so involved and so adherent to the surrounding structures, that their removal alone was out of the question. I then decided to perform hysterectomy. After considerably enlarging the abdominal incision, I was enabled, with the aid of very strong Vulsellum forceps, to deliver the tumour. I then proceeded to ligature the broad ligaments in sections, bleeding on the uterine side of the ligatures being controlled by means of long pressure forceps. A good deal of difficulty was experienced in dealing with the left broad ligament, on account of adhesions. After tying the uterine arteries, I proceeded to deal with the uterus after the manner adopted by Schröder, and already described in the previous cases.

After operation, the temperature was 99°, pulse 80, and respirations 22. Patient was fed with nutrient enemata, and the fluid from the drainage tube evacuated every hour. The fluid obtained was pale in colour, and only amounted to two drams at a time. On the third day after operation, the temperature rose to 101°, and the pulse to 108; peritonitis had set in; mag. sulph. was administered in full doses, and the bowels copiously evacuated. The temperature fell again on the fourth day, and patient appeared somewhat better. It, however, soon rose again, and persisted at from 102° to 103°, in spite of antipyretics. On the sixth day, the patient showed signs of collapse, and died from peritonitis. The discharge from the tube was never offensive, but on the fifth day it had a slight mawkish odor, and the abdominal cavity was frequently irrigated with a boric acid solution. This patient was in a very weak condition on admission. Her frequent floodings had rendered her so anæmic, that her case was never at any time a hopeful one.

FIBRO-MYOMA OF UTERUS, COMPLICATED WITH
PYO-SALPINX AND GENERAL PERITONITIS.

Mrs. H., æt. 28 years. I was asked to see this lady in consultation with Dr. F. She had been under his treatment only a few days, but had had other advice on numerous occasions during the past four years. Her history, as related to him, was that she was quite well up till marriage four years ago. Shortly after marriage, she contracted a venereal disease from her husband, and has never been well since. Her menstruation has been regular, but profuse and extremely painful. Between her menstrual periods, she has suffered from an irritating leucorrhœa, and has had an almost constant pain in the lower abdomen. The pain has usually been of a dull aching and bearing-down character, but she has also had numerous attacks of very acute pain. She thought that some years ago she was rather "high-stomached," but she has for the last two years noticed that her abdomen was gradually becoming more prominent.

On examination, it was seen that patient was very ill indeed ; she was lying on her back, with the knees drawn up to the abdomen ; the face looked pinched and anxious, the tongue was dry, the temperature 100·8°, and the pulse 116. She complained of feeling very ill, and of an intense pain in the lower part of the abdomen. The abdomen was extremely tender and dull in the mid-line for about eight inches above the pubes ; above this, and in either flank, it was fairly resonant. On vaginal examination, there was a nasty thin uterine discharge. The pelvis was occupied by two distinct tumours—one, in the anterior part, was extremely hard, and was evidently the uterus much enlarged ; the other, situated posteriorly, was semi-fluctuant, and extremely tender. From the history of the patient, and her symptoms, I decided that this latter was either a large pyo-salpinx, or an encysted abscess in Douglas's space. The uterine sound passed six inches, and there was no doubt that the anterior tumour was a fibro-myoma of the uterus. Both tumours were quite immovable.

The patient was very ill, and had been gradually getting worse, and I advised removal of the tumours by abdominal section. She went into the private hospital on July 14th. During her

first two days' residence, she became decidedly worse, and I operated on July 17th. Notwithstanding the fact that she had been ill for such a length of time, the abdominal walls were very fat, and rendered the operation one of extreme difficulty.

On opening the abdominal cavity, the viscera seemed to be bound together in one mass by very dense adhesions. The omentum was everywhere adherent to the abdominal peritoneum, and had to be cut through. Its veins were enormously enlarged, and many of them had to be separately ligatured before division. After a tedious separation of numerous adhesions, I came down upon the posterior tumour. It was everywhere adherent to the surrounding structures, and was with great difficulty removed. It proved to be a large pyo-salpinx of the right side. There was a considerable amount of hæmorrhage, which was controlled by pressure. I then proceeded to tie the vessels in the broad ligaments, after which the uterus was removed, and the cervix treated after the method of Schröder. During this part of the operation, there was little or no hæmorrhage. After the abdominal toilet, a drain tube was inserted, and the abdominal wound closed with silver wire sutures. The operation occupied nearly two hours, and at its termination, patient was very weak and low. She was put to bed, and artificial warmth applied, and stimulants administered. Although she became quite sensible after the anæsthetic, she did not rally from the shock of the operation, and died eight hours after its completion.

**“INFANTILE UTERUS”—CYSTIC DISEASE OF RIGHT
OVARY — INTOLERABLE DYSMENORRHEA —
SALPINGO-OOPHORECTOMY.**

Mrs. B., æt. 35 years, was sent to me from the country. She had been under treatment, with little or no benefit, for some years. She was married at 25 years of age, and has never been pregnant. She complained of an almost constant abdominal pain, which was greatly exaggerated at each menstrual period. Her suffering was

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so great, that she found it necessary to remain in bed during the whole of each menstruation.

On examination, the uterus was found to be infantile in character, and to be acutely antiflexed. The right ovary, which was enlarged, could be easily felt prolapsed in Douglas's space. There was great tenderness in the left ovarian region, but the ovary could not be felt. As the patient had been under treatment for some years, with little or no benefit, and as the condition of her uterus contra-indicated the possibility of a future pregnancy, I decided to remove the uterine appendages. She was admitted to the private hospital on July 19, and I performed abdominal section three days later.

On opening the abdominal cavity, the right ovary was found to be much enlarged, cystic, and prolapsed, while the left was extremely atrophied, being only about half the size of an ordinary ovary. The appendages of both sides were removed, and the abdominal wound closed with silkworm-gut sutures. No drain tube was inserted. The temperature never rose above 99°, and patient, who made an excellent recovery, left the hospital on August 11. Since the operation, she has been entirely free from pain, but the artificial menopause has given rise to more than the usual amount of unpleasant symptoms.

ECTOPIC PREGNANCY.

Mrs. L., æt. 34 years, consulted me in May of last year. She had had three children, the last six years ago. She did not have a very good time at her last confinement, and was in bed for three weeks. Since then she has never felt quite well, has suffered from pain in the region of the uterus, and in both iliac fossæ, and has been troubled with leucorrhœa. Her menstruation has for some years been quite regular, until about four months ago. It then ceased for three months, and at the end of that time she was suddenly seized with violent abdominal pain. This pain was

accompanied by a discharge of blood from the vagina, and she believed that she was about to miscarry. She passed a few clots, but did not observe anything resembling either fœtus or decidua. She has off and on for the past month had a sanguineous vaginal discharge, and has suffered from an almost constant pain in the lower abdomen.

On examination, there was great tenderness in both iliac fossæ, and on percussion in these regions, the note was much duller than normal. There was a well marked areola around each nipple, and the breasts contained fluid. On vaginal examination, the uterus was found to be somewhat enlarged, and to be pushed well up against the pubes. The whole of the space of Douglas was occupied with a firm tumour, which was more prominent on the right side. On bi-manual examination, there was a good deal of tenderness. There was undoubtedly a pelvic tumour of recent formation, and as the history of the case pointed directly to the presence of an ectopic gestation, I decided to perform an exploratory abdominal section. The patient was admitted to the private hospital on May 17, and as her case appeared to be urgent, I decided to operate as soon as possible.

The operation was performed on May 19. On opening the abdominal cavity, the whole of the pelvis on the right side was found to be occupied by an ill-defined tumour. It proved to be an ectopic gestation. The sac was bound down by extensive adhesions, and some difficulty was experienced in removing it. During its removal the sac ruptured, and the fœtus escaped. There was some free hæmorrhage at the site of separation of the adhesions, but this was easily controlled by pressure with hot sponges. The peritoneal toilet was performed, plain hot water (which had been previously boiled) alone being used. A drain tube was inserted, and the wound closed with silkworm-gut sutures. The tube was evacuated every two hours for the first twenty-four hours, the quantity of discharge being profuse and high coloured. On the second day, however, the quantity was less, and the colour much less bright. The tube was removed on the eighth day, when the discharge was sweet, scanty, and of a light straw colour. The sutures were removed on the tenth day. The temperature never rose above 100·2, and patient, who made an excellent recovery, left the hospital on June 28, 1893.

DOUBLE PYO-SALPINX — SALPINGO-
OOPHORECTOMY.

A. de L., aged 21 years, single, was admitted to the infirmary department of the Women's Hospital. Patient states that she was fairly well up till three months before admission, when she was confined in the midwifery department of the Hospital. She had, soon after she became pregnant, noticed some sores on the vulva, has suffered from constant vaginal discharge, sore throat and mouth, and has lost a considerable quantity of hair. The records of her accouchement show that the child was ill-developed, and distinctly syphilitic. Her lying-in period was characterised by an almost continuous high temperature, from the third till the ninth day. On the fifth day, a good deal of thickening was found around the uterus. This, under treatment, was considerably reduced, but although the temperature was for some days normal before she got up, this thickening never entirely disappeared. She got up on the fourteenth, and was discharged on the twentieth day.

On admission into the infirmary department, she presented a very weak and unhealthy appearance, and complained of severe and constant pain in the lower abdomen.

On examination, the abdomen was fairly normal in appearance, extremely tender, and dull on percussion in both iliac fossæ. There was a nasty semi-purulent discharge from the vagina, the cervix was lacerated, and the uterus retroflexed and tender. There was great thickening all over the pelvic floor, and a sense of deep fluctuation in the region of both Fallopian tubes. Her temperature was 100° F. Patient remained in the Hospital three weeks before operation, during which time she was placed on a liberal diet, and had the vagina irrigated with hot water for fifteen minutes thrice daily. During these three weeks she improved very considerably, and at the time of the operation (on June 4), her temperature had been for some days normal.

During the operation, there was a good deal of difficulty in separating the uterine appendages from their adhesions. Both tubes were very distended, and their separation was fortunately effected without rupture. A drainage tube was inserted. For the first three days after operation, the temperature remained at

about 100·5°, the discharge from the tube was slightly fœtid, and the abdominal wound looked angry and inflamed. Every precaution had been taken during the operation to prevent any escape of pus into the abdominal cavity, and the small portion of the tube external to the ligature had been rendered as aseptic as possible by the application of pure carbolic acid. As it seemed probable that her unfavourable symptoms were aggravated by her previous attack of syphilis, the oleate of mercury was ordered to be rubbed into the axillæ. After a few applications there was a decided improvement, the abdominal wound assumed a more healthy character, and the temperature became normal on the sixth day. The discharge from the tube daily became less offensive, and was free from odour on the eighth day, when the tube was removed. From this time there was slow but gradual improvement, and the patient was discharged to the Convalescent Home on July 19.

HARD MULTINODULAR FIBRO-MYOMA OF UTERUS —HYSTERECTOMY.

C. T., aged 47 years, single, was admitted to the Women's Hospital. Patient stated that she was quite well up till eighteen months before admission, when she first noticed a pain in the small of the back and in the left side. This pain came on gradually, and was most severe at her menstrual periods. The catamenia have for some time been irregular and very profuse, and have been attended with great pain.

On admission, patient complained of crampy pains in the lower abdomen and left iliac fossa, also a large swelling which occupies the greater part of the abdomen. Her general condition was fairly healthy.

On examination, the hypogastric and left iliac regions were found to be occupied by a dense tumour, which extended from the pelvis to within two inches of the umbilicus. There was great tenderness on palpation. On double palpation, a very tender tube

and ovary could be felt high up on the left side. The cervix was drawn high up underneath the pubes, and Douglas's pouch was occupied by a dense and firm mass. The diagnosis was fibromyoma of the uterus, and I decided to perform abdominal hysterectomy.

The operation was performed in a manner similar to that adopted in the previous cases. There were no adhesions or other complications, and during the performance of the operation, which occupied only thirty-two minutes, the patient did not lose more than an ounce of blood.

After the operation, she was fed by the rectum for the first twenty-four hours. At the end of that time, her temperature was 99·8°, pulse 72, and respirations 20. She slept well, and did not suffer much pain. On the third day the bowels were moved by calomel, and from that time on she made an uninterrupted recovery. The abdominal wound healed by first intention, and the sutures were removed on the ninth day. Patient left the hospital feeling remarkably well on the thirty-fourth day after operation. Two months subsequently she reported herself, and stated that she had never felt better in her life.

INTESTINAL OBSTRUCTION THREE WEEKS AFTER CONFINEMENT—ABDOMINAL SECTION.

This case I saw in consultation with Dr. Sutherland, of Ascot Vale, to whom I am indebted for the notes of her history up till the time of operation.

Mrs. B., aged 32 years, was confined on the early morning of April 24, 1893. Her labour pains had begun only six hours before delivery, which was quite normal. The placenta and membranes were expelled, and were apparently complete. The perinæum was not lacerated, but the vaginal tissues were a good deal bruised. She apparently was doing well until the evening of the third day, when her temperature rose to 100°, and her pulse to 110. A dose of *ol. ricini* was given, and the bowels

freely evacuated. On the fourth day, the temperature rose to 101°, and the pulse to 112, and the abdomen was becoming somewhat tympanitic. On the eighth day, she had a smart attack of diarrhœa, which was checked by *mist. cretæ c̄ catechu*. The temperature and pulse still remained high—the former at about 101°, and the latter at 110 per minute. The bowels acted regularly until the twenty-first day, when they ceased altogether, and the nurse gave her a dose of oil. This did not act, and she gave her a dose of *pulv. rhei c̄ soda*. This also had no effect. Two days before the bowels ceased to act, the temperature had fallen to 98°, and the pulse remained at about 110. On the twenty-third day, patient had a severe attack of vomiting, which, according to the account given by the nurse, was dark, and had a very offensive smell. She passed nothing through the bowel, neither wind nor fæces, and the abdomen again became greatly distended and tympanitic. Next day, she vomited about a quart of fæcal matter, of most offensive odour.

At this stage, I was asked to see the patient in consultation. She had always been a very healthy woman, and had never been laid up. She had, however, a history of having had, on one occasion, a rather acute abdominal pain, which came on after a sea bath. It had, however, rapidly disappeared, after the applications of hot fomentations to the abdomen. From the history of her lying-in period, and her present symptoms, I concluded that the bowel had become involved in some inflammatory adhesions, and advised an exploratory operation.

The patient having been anæsthetised, I made a free abdominal incision. The small intestine was very distended, and in parts deeply injected. After placing large flat sponges under each side of the abdominal wall, to prevent, if possible, the escape of the small intestine through the wound, I passed my hand into the abdominal cavity. Deep down in the pelvis, on the right side, I came upon a firm fibrous band, under which a coil of small intestine had passed, and become strangulated. This band I immediately divided between two ligatures, and freed the strangulated intestine. During this part of the operation, a large coil of small intestine escaped through the abdominal wound. It was extremely distended, so much so that it could not be returned. I therefore punctured it with a good sized trocar, and allowed a

large quantity of its contents, both gaseous and fluid, to escape. After closing the intestinal wound with Lembert's sutures, the intestine was easily returned. The abdominal wound was closed in the ordinary manner, and a drainage tube inserted.

After the operation, patient was very weak and low, but she gradually improved. There was very little vomiting during the first twenty-four hours, and the ejecta had lost their fæcal character. After an enema of turpentine and water, a large quantity of flatus and some fæces were passed. On the day after the operation, the bowels were moved naturally. The pulse rapidly began to improve in character, and a few days after operation, both it and the temperature became normal. From this time onward, the patient made an uninterrupted recovery. She got up on the twenty-fourth day after operation, and she is now strong and well.

DOUBLE PYO-SALPINX—ABDOMINAL SECTION.

F. J., aged 30 years, was admitted to the Women's Hospital. Patient stated that she was quite well up till six years before admission, when she was confined of her first child. Her labour was not difficult, but convalescence was slow, and immediately on getting up, she suffered from severe bearing-down pains in the region of the uterus and in both iliac fossæ. These pains have been almost constant since, but were not quite so severe during the time she was carrying her second child, which was born two years ago. Since the birth of this child, however, the pain has been more severe than ever, and she has been once or twice treated for attacks of pelvic peritonitis.

On admission, patient complained of severe pain in both iliac fossæ, painful micturition and defæcation. She was very delicate, and appeared to have undergone a great deal of suffering.

On examination, the abdomen was somewhat distended, and extremely tender at each side of the uterus. On percussion, the note was fairly resonant, except on the left side of the uterus, where it was decidedly dull. The cervix uteri was badly lacerated; there was a nasty semi-purulent discharge from the cervix, and the

uterus was retroflexed, firmly fixed, and exquisitely tender. The whole of the pelvic organs were firmly matted together, and in the region of the left broad ligament, there was a distinct sense of fluctuation.

The case was evidently one of old pyo-salpingitis, with consequent pelvic peritonitis, and I decided to perform abdominal section. On opening the abdominal cavity with the usual median incision, the pelvic organs were found to be matted together by extensive and very firm adhesions. The right appendages were removed after a little trouble, but on the left side, everything was so matted together that I found it necessary to enlarge the abdominal incision sufficiently to allow the whole hand to be inserted into the abdominal cavity. The left tube was very distended and adherent, especially to the posterior surface of the fundus uteri, and during its removal it burst, and discharged some very unhealthy pus, which however was not allowed to come in contact with the peritoneum. Subsequent to the removal of the left appendages, there was some very free bleeding from deep down in Douglas's space. On close examination, it was found to proceed from the posterior surface of the uterus, and to be due to the separation of the strong adhesions which bound the distended tube to that organ. The bleeding was really severe, and as ordinary measures failed to check it, I tied the uterine and ovarian arteries of the left side. This was immediately effectual. The abdominal cavity was thoroughly irrigated, a drainage tube inserted, and the wound closed in the usual manner.

Immediately after the operation patient was very weak and exhausted, but she rallied, after stimulating enemata and the application of a good supply of artificial heat. For the first twenty-four hours she appeared to do fairly well, but on the evening of the second day her temperature rapidly rose, and she was found to have developed some pneumonia at the bases of both lungs. Fortunately, she was able to retain food and medicine given by the mouth. The chest was well poulticed, and stimulants, in addition to a mixture of quinine and ammon. carb., administered by the mouth. On the third day, the pneumonia appeared to be running a typical course, and in addition, the discharge from the tube became very offensive, and the abdomen distended, tympanitic, and tender. No flatus was passing, and

the patient was evidently in a bad way. However, under treatment and with good nursing there was, on the fifth day, a decided change for the better. Stimulants had been freely administered, the chest and abdomen continuously poulticed, the abdominal cavity washed out regularly at intervals of two hours, and enemata of turpentine had had a very beneficial effect in reducing the tympanites. The temperature fell gradually to normal on the seventh day, and with its decline, there was a marked improvement in the general condition of the patient. The tube was removed on the eighth day, and the patient transferred from the special to the general ward. Shortly afterwards she was discharged, and is now in perfect health.

LARGE SARCOMA OF RIGHT OVARY, COMPLICATED WITH ASCITES.

E. B., single, aged 21 years, was admitted to the Women's Hospital. Occupation, saleswoman; residence, Carlton; born in Victoria. First catamenial period at 13 years of age. Menstruation regular, but very painful and profuse. Was quite well up to the beginning of last July, when she began to feel pain in the right iliac fossa, and at the same time noticed some swelling in this region, which has gone on increasing, until the whole abdominal cavity is now very much distended. She has rapidly lost flesh and strength, suffers from severe night-sweats, and has much difficulty in micturition and defæcation. Latterly, she has suffered much from dyspnoea, which is relieved by sitting up—a posture which she now constantly maintains.

November 1.—Abdomen uniformly distended to a marked degree—shining, tense, tender to the touch, and more resistant on the right side; resonant centrally, but dull everywhere else; marked fluid wave. Before the distension became so great, a distinct tumour could be felt in the right iliac region, reaching a little above the umbilicus. On vaginal examination, the uterus was quite fixed, and Douglas's pouch distended with fluid, all the

parts occupying a lower plane in the pelvis than normal. The urine was loaded with urates, but no albumen.

Family History.—Father living, takes fits. Mother died from bronchitis. Three brothers and sisters dead; eldest from phthisis, cause of others not known.

I performed abdominal section on the afternoon of November 5. I found the abdomen filled with a brownish ascitic fluid, and the pelvis and lower abdomen occupied by a soft friable tumour, irregular in shape, and firmly adherent to all surrounding tissues and organs. The tumour was, with great difficulty, separated from surrounding structures, and its removal was followed by profuse general oozing from the raw surface, all over the floor of the pelvis, which I found impossible to check by ordinary measures. I tried pressure with hot sponges; and the same wrung out of a warm solution of iodine, without avail. I next had recourse to hæmostatic tamponade, with the best result. I packed the true pelvis with a long strip of corrosive sublimate gauze, bringing the free end through a large glass drainage tube.

After the administration of a warm beef tea and brandy enema, the patient was now removed to the special ward. The usual feeding by bowel was attended to, and sips of toast water only given by mouth for two days. The patient progressed satisfactorily. The tamponade was removed after thirty-six hours, with comparative ease, and without removing tube. No fresh hæmorrhage. Shortly after the removal of the tampon, a free, offensive, brownish discharge filled the tube. It was now found necessary to wash out the cavity every hour, boric acid solution being used, with the occasional substitution of weak iodine. The temperature, which during first week varied between 101° and 102°, dropped to 99°, and the pulse, which was 140 after the operation, gradually slowed down to 90 on the ninth day, when she was removed from the special into the general ward. The bowels were opened on the second day. Starting with a 1gr. dose of calomel every hour, for six consecutive hours, followed by 3j doses of mag. sulph. every two hours. After the second day, she was able to take sufficient nutriment by the mouth—chicken broth, Brand's essence, &c. There was no vomiting from the first, and the abdomen remained quite flat and lax. The sutures were all removed on the ninth day.

December 10.—The patient has been carefully attended in the Hospital during the past two months. During this time the drainage tube has constantly discharged a very offensive fluid, necessitating the washing out of cavity every two hours, perchloride solution (1 in 2000) being used, with an occasional resort to weak iodine.

The tube was removed on January 11, and the discharge from the deep sinus still remaining, is still slightly offensive. The temperature is now quite normal, and there is, so far, no sign of recurrence, or secondary deposit in other organs. The patient takes plenty of nourishment, and has increased in weight and strength.

CYSTIC DEGENERATION OF BOTH OVARIES AND FIBROID OF APPENDIX.

Miss O'K., æt. 32, consulted me during January of this year. She was then suffering from slight mental trouble, and as a consequence, there was some little difficulty in obtaining a reliable account of her illness. She is a native of Victoria, and menstruation began during her fourteenth year. She had been fairly regular up till six months before she consulted me; her periods lasted usually from five to seven days, and there had been, during the last four years, great dysmenorrhœa. During the latter six months of last year, menstruation had been very irregular, and the quantity had varied considerably, while each period had been marked by severe dysmenorrhœa. There was nothing of interest in the family history.

Patient herself had, up till six months ago, been always fairly healthy in body, although her mental condition had for some time previous to this given her friends some anxiety. She has always suffered, more or less, from constipation, but further than this there was no history of intestinal trouble. On her first visit to me she complained of severe, dull, aching pain in the lower

part of the back and in the lower abdomen, frequent and painful micturition, a bearing down pain in the region of the uterus, painful menstruation, great nervousness, and an almost constant frontal headache.

On examination, the abdomen was found to be slightly enlarged, there was a good deal of tenderness in both iliac fossæ, and in these regions, but more particularly in the right, the percussion note was decidedly dull. Per vaginam, the vagina presented the normal condition of an unmarried woman; the uterus was fairly normal in position and size, but was very tender on bimanual palpation. On each side of the uterus, and posteriorly, a tumour could be felt, that on the left side being semi-fluctant, and larger than that on the right. Both tumours were extremely tender, and I recommended their removal by abdominal section.

Patient went into one of the private wards of St. Vincent's Hospital, and, after a few days' preparation, I, with the assistance of the other members of the staff, operated upon her.

The abdomen was opened with the usual median incision. The tumours felt per vaginam proved to be enlarged ovaries, which had undergone cystic degeneration. The left was somewhat the larger, and contained one cyst about the size of a large orange. This cyst was interesting, from the fact that it was filled with very dark blood. During the removal of the right tumour, I felt an abnormal swelling in the region of the cæcum. It was very hard, and on close examination, proved to be a tumour of the appendix vermiformis. It was about the size of a bantam's egg, and adherent to both cæcum and ileum, and I decided to remove it. After separating the adhesions, I ligatured the tumour and removed it; the free end of the appendix was treated by inverting the peritoneal surfaces, and closed the opening with Lembert's sutures. A drainage tube was inserted, and the abdominal wound closed with silver wire sutures.

Patient made an uninterrupted recovery, and is now not only quite well, but her mental condition has wonderfully improved.

A LARGE MULTILOCULAR, PAPILLOMATOUS TUMOUR OF EACH OVARY.

Mrs. B., æt. 35, consulted me privately at the end of January of this year. She complained of a great abdominal swelling, which she said was increasing very rapidly; also of pain in the small of the back and abdomen, frequent and painful micturition and obstinate constipation. She also complained of dyspnoea on exertion. She had been married twelve years and had three children, the last four years ago. Her menstruation was regular before marriage. Since the birth of her last child she had been very irregular, and latterly the amount had been very scanty. She could not say definitely when she first noticed the swelling of the abdomen, but its increase during the last few months had been very great.

On examination, the abdomen was found to be greatly enlarged, and to be almost completely occupied by some abnormal growth. There was little or no tenderness on palpation. The percussion note was particularly dull in both iliac fossæ, the dulness extending on both sides almost up to the lower ribs. The dulness was not so well marked in the lumbar regions, nor in the mid-abdominal line, where there was a well marked sulcus. On per vaginam examination, the whole floor of the pelvis was found to be occupied by a dense elastic tumour. The uterus was larger than normal, and was pressed well forward above the pubes. I advised abdominal section for the removal of the tumour, and patient having decided to undergo the operation, went into a private ward at St. Vincent's Hospital early in February.

After a few days' preliminary treatment, I proceeded to operate. On opening the abdominal cavity with the usual median incision, I came upon a large papillomatous tumour of each ovary. Each tumour was so large that, to effect delivery, I found it necessary to increase the abdominal incision well above the umbilicus. After extraction of each tumour, the pedicle—which in each case was extremely thick and fleshy, and formed by the hypertrophied and expanded ala of the corresponding broad ligament—was secured by the interlocking ligature, and the tumour removed. The abdominal wound was closed as usual with silver wire sutures, and patient made an excellent recovery, having left the hospital on the fourteenth day.

[For the Notes of the following cases, I am indebted to Dr. Pinniger, Senior Resident Surgeon, Women's Hospital.]

PAR-OVARIAN CYST.

M. P., married, aged 31 years, was admitted to the Women's Hospital. Occupation, household duties; residence, Richmond; born in Victoria. First catamenia at 14½ years of age; interval, four weeks; duration, four days; quantity, scanty. Dysmenorrhœa. At the present time, catamenia regular every four weeks; duration, four days; quantity, normal. Slight dysmenorrhœa. Married seven years ago, when aged 24 years; two children; no abortions. Had very easy confinements, last occurring four years ago. Never had instruments or chloroform. Up on the tenth day, and recoveries good. Was quite well up to the birth of the first child (six years ago), when she noticed severe pains in the head and lower abdomen, chiefly on the left side. These have been steadily increasing. She has always been able to do her work, but has a feeling of weariness after slight exertion. Now complains of the above symptoms in an aggravated form, with severe pain in the back, and says that she is unable to earn her living in her present condition. She has no bladder or rectal inconveniences. General condition weakly. Abdomen normal in its appearance and consistence, but some slight tenderness in the left iliac fossa, with a sense of resistance on deep palpation. On examination, the vagina was found moist and roomy; os uteri patulous; cicatricial band felt at left cervico-vaginal junction. A fluctuating swelling felt posteriorly to the left of the fundus uteri, but not tender to the touch.

Abdominal section was performed by Dr. O'Sullivan on August 10, 1893. The usual opening having been made, the left side of the pelvis was found to be occupied by a par-ovarian cyst, about the size of a goose's egg. There were no adhesions, and no distinct pedicle, the cyst was removed with its corresponding tube and ovary; the right ovary and tube being in an unhealthy condition, were also removed. There was no oozing after; no drainage tube was inserted. The wound was sutured and dressed with boracic acid. The patient was fed for the first two days on nutrient enemata, getting teaspoonfuls of hot water by the mouth.

Afterwards got chicken broth, Brand's beef essence, and arrowroot by the mouth. The patient recovered without any bad symptoms. The temperature did not rise above 101° F., nor the pulse above 110. The sutures were removed on the eighth day.

CHRONIC INFLAMMATION OF APPENDAGES, WITH PARENCHYMATOUS CYSTS OF OVARIES.

B. B., single, aged 31 years, was admitted to the Women's Hospital. Residence, Hawthorn, Victoria; born in Scotland, and arrived in Victoria four years ago. Occupation, domestic servant. First catamenia at 18 years of age; duration, six days; intervals of four weeks. Very severe dysmenorrhœa, and very free menorrhagia. At the present time, catamenia regular, at intervals of four weeks; duration, six days, with very severe dysmenorrhœa and menorrhagia. Has had two children; no abortions. Had very free hæmorrhage at her confinements, and made slow recoveries. Did not have instruments or chloroform at confinements. Was quite well up to her first catamenia, since then has always had dysmenorrhœa and menorrhagia, the discharge coming away in clots; very much worse during the last eighteen months (since her last confinement). Has constant burning pain in the lower abdomen, and bearing-down pains in the vagina. Aching pains in the small of the back, severe headaches, and free and offensive leucorrhœa. Now complains of the same symptoms, together with shiverings and great feeling of body heat at poorly times. General health fair. Abdomen flat and lax, some tenderness in the lower region, chiefly on the left side. Vagina soft, moist, and roomy. A movable fluctuating tumour felt in Douglas's pouch. Fundus uteri movable, not enlarged, and in the normal position.

Abdominal section was performed by Dr. O'Sullivan on September 7, 1893. The usual incision having been made, both ovaries were found to be very much enlarged, and firmly adherent in Douglas's pouch, the parenchyma of each having undergone

marked cystic degeneration. Double oophorectomy was done without any difficulties. No drainage tube inserted. The patient recovered without a single bad symptom. The temperature never rose above 99·5° F., and the pulse never went above 91. The sutures were all removed by the eighth day. Patient fed at first by nutrient enemata. The bowels were opened on the second day. The usual alterative doses of calomel followed by mag. sulph.

PYO-SALPINX.

M. K., married, æt. 26 years, was admitted to the Women's Hospital. Occupation, household duties; residence, Fitzroy; born in Victoria. First catamenia at 14 years of age; interval, four weeks; duration, four days; no pain, and normal quantity. At the present time, catamenia irregular, at intervals of three weeks; duration, seven to ten days; no pain; quantity profuse, with clots. Married eight years ago, when aged 18 years. One child seven years ago—easy labour and good recovery. Was quite well up to twelve months after the child was born (6 years), then noticed that she felt weak, and got very tired after slight exertion; but no pain, unless she exerted herself, when she got bearing-down pains. About four years ago, noticed pain in the left side of the lower abdomen, which has been more or less constant ever since, and very much intensified on exertion. During this time, she has had constant leucorrhœa. These conditions are gradually getting worse, and she is now unable to do her household duties. General condition healthy; abdomen soft, uniform, not distended; no tenderness, except on deep pressure in centre, just above the pubis and to the left. Vagina moist and roomy. A soft fluctuating swelling felt to the left of and behind the uterus. Os uteri gapes; cervix elongated.

Abdominal section was performed by Dr. O'Sullivan on November 2, 1893. The usual opening having been made, a large distended tube the size of a turkey's egg was found behind the uterus, filled with pus. Both ovaries were enlarged, and in a soft

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degenerated condition. They were rather firmly adherent to the adjacent parts, and were with much difficulty removed (with the tubes) without rupture of the pus sac. General oozing was free, but easily checked by hot sponging. A glass drain tube was inserted, and the wound sutured and dressed with boracic acid.

After-Treatment.—The discharge through the drainage tube was free at first, and the tube had to be exhausted every twenty minutes. It soon diminished in amount, and became serous in character. The tube was removed on the fifth day. Patient was fed at first by nutrient enemata. The bowels were opened on the second day, usual calomel and mag. sulph. Patient recovered without a bad symptom. The temperature never went above 100° F., nor the pulse above 96. The sutures were removed on the eighth day.

TUBO-OVARIAN ABSCESS.

R. K., married, aged 33 years, was admitted to the Women's Hospital. Occupation, household duties; residence, Fitzroy, Victoria. First catamenia at 16 years of age; interval, four weeks; duration, five to six days; no pain, and quantity rather free. At the present time, catamenia irregular, at intervals of one to three weeks; duration, six to eight days. Slight dysmenorrhœa and profuse menorrhagia. Married twelve years ago, when aged 21 years. Has had three confinements and one mishap. Last confinement six years ago, and last mishap fourteen months ago. Never had instruments or chloroform at confinements, and up on the ninth day. Was quite well up to the birth of the second child (nine years ago), when she noticed that she had severe menorrhagia at each menstrual period. At times, it would last two weeks; has always had very severe catamenia since then. Also complains of severe pain in the lower abdomen, chiefly in the left iliac fossa; weakness, headaches, faintings, severe pain in the back, and at times night-sweats. Now complains of severe menorrhagia, and irregular and frequent menses. Pain in the lower abdomen, chiefly in

the left side; headaches and general weakness. Leucorrhœa during the intervals, which is very profuse at times, and very offensive. General condition weakly, and losing flesh rapidly. Abdomen flat and firm. Tenderness on pressure all over the lower abdomen. Tumour felt in the right iliac fossa. Vagina roomy, moist, and menses now on; cervix enlarged; external os gaping. Tumour felt to right of uterus, and extending back, fluctuating, and firmly connected with the uterus, which is fixed.

Abdominal section was performed by Dr. O'Sullivan, on November 23, 1893. The usual opening having been made, the tumour proved to be a tubo-ovarian abscess of the right side, about the size of a turkey's egg, intimately connected with a small par-ovarian cyst, about the size of a hen's egg. These were firmly adherent to the uterus, small intestine, and other adjacent parts, and on first introducing the hand, had very much the feel of a uterine fibroid, from its hardness. The adhesions were with great difficulty separated, and there was very free oozing after, which was easily stopped by hot sponging. The tube and ovary of the left side, being in a state of chronic inflammation, were also removed. On opening the left tube, it was found to contain pus. A glass drain tube was introduced, and the wound dressed with boracic acid dressing.

After-Treatment.—Patient was fed for the first two days by nutrient enemata, alternated with zymised meat suppositories; getting a little hot water by mouth; afterwards got chicken broth, Brand's essence, and a little arrowroot by the mouth. The bowels were opened on the second day, starting with a 1-grain dose of calomel hourly for six hours, followed by 3j doses of mag. sulph. Patient got slight mercurialism, and the bowels became very lax. On the third day, the discharge from the tube became very offensive, having a fæcal odour. The cavity was washed out hourly for four days with boracic acid solution, and afterwards every two hours. The discharge gradually cleared up, and lost its fæcal odour. The temperature reached 103° F. on two or three occasions, averaging 101·6°, but came down to normal by the end of the third week. The pulse did not go above 112. She left the Hospital at the end of the fourth week, perfectly free from any symptoms, and presented herself a few days ago in perfect health.

DOUBLE PYO-SALPINX.

Mrs. McC., native of Ireland, æt. 33, married ten years, no children, was admitted to St. Vincent's Hospital on December 14. She had never been well since her marriage. Shortly after marriage she commenced to complain of severe pelvic pains, more especially at her monthly periods, when she had to take to her bed. She was seldom free from pain in the back, and for some time she had been utterly unable to endure married life. On bimanual palpation, I found the uterus pushed slightly towards the front, and behind it, on each side, there was a distinct mass, fixed, and very tender to touch. She had been under a great variety of treatments, even the everlasting pessary was brought into requisition, without, it need hardly be said, the slightest benefit.

I made an exploratory incision, and found both tubes distended with solidified matter, and firmly adherent in Douglas' space. The contents of the tubes turned out, on careful examination, to be inspissated pus. The operation for their complete removal was extremely difficult.

She made an uninterrupted recovery from the operation, and on January 10, I found the uterus quite free, and everything quite normal.

She left the hospital on January 17 in perfect health.