An Address ON BACKACHE IN WOMEN.*

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WHEN I started making a few preliminary notes on the subject given me by your secretary—namely, backache in women—I was faced at once by the question: Was I to attempt a scientific and orderly review of all the varieties of backache, with their causes, diagnosis, and treatment; or was I to talk about backache in a much more informal way, discussing the common causes, the differential diagnosis of cases of backache as met with in ordinary everyday practice, pointing out some of the most likely pitfalls for the unwary who omit to make as thorough an investigation as they can, and to tell you what treatment I have found most successful? I chose the latter, and hope that I have done right.

Backache is one of the commonest complaints of women; in fact, one lady member of our profession has said that women may be divided into two classes—namely, women with backs and women without them. The following is a rough and ready classification of some of the causes of backache which will be of some use for our purpose to-day, and will avoid some needless repetition:

Definite disease or injury of some of the tissues of the back.

Fatigue without abnormal physical signs.

Enteroptosis.

Abdominal tumours.

Carcinoma of the uterus.

Carcinoma of the rectum.

Disease or infection of the kidney.

Retroversion of the uterus.

Prolapse.

Chronic pelvic inflammation.

There is nothing to prevent a patient from having at the same time troubles coming under more than one of these headings. This is a very important matter from the point of view of treatment, and will be referred to later.

Disease or Injury of some of the Tissues of the Back.

This is a very large class of cases, including among others caries of the spine, secondary malignant growths, aortic aneurysm, injury or disease of the sacro-iliac or sacro-coccygeal joints, bruising or tearing of muscles, etc. This class emphasizes the importance, in the diagnosis of backache, of not trusting to abdominal, vaginal, rectal, and bimanual examination alone, but examining the back itself as well. It does not take long to examine the back; the important points are: Is there any limitation of movement or rigidity in any part of the back? Is there tenderness of any part of the back made worse by pressure? Is there any tenderness of the sacro-iliac or sacro-coccygeal joints, with pain on passive movement?

I saw last year a patient, aged 36, from whom I had removed a tuberculous pyosalpinx eight years previously. She was complaining of "lumbago" and "sciatica," and was being treated by massage and electricity. Examination of the back revealed definite rigidity, and an x-ray examination showed caries. Instead of massage and electrical treatment she was treated by a spinal splint, grafted on from the tibia, and a plaster jacket, with the happiest results.

If a patient can touch her toes without bending her knees, bend over backwards and to either side, and can stand being gently thumped all over her back without pain, disease of the spine can be excluded, but if anything in this examination causes suspicion that there may be spinal disease an x-ray examination should be made.

Aneurysm of the aorta in women is rare, and would probably be fairly easy to diagnose.

If there is a secondary malignant growth eroding one or more of the vertebrae there will be evidence of a malignant growth elsewhere, or a history of removal of the breast or uterus, or some other operation for malignant disease some time before. The severity of the pain in

these cases is usually far greater than that of the common backaches of women.

Disease of the sacro-iliac joints is rather rare. Unless it is advanced, definite proof of its presence cannot be obtained without an x-ray examination. Injury or strain of these joints, however, is more common, sometimes as the result of labour, sometimes as the result of a fall. In such a case the pain and tenderness are localized to one of the sacro-iliac joints, and the pain is increased by pressure on the iliac crest and by an attempt at passive movement of the iliac bone on the affected side. The best treatment is counter-irritation combined with firm strapping of the affected side of the pelvis. In many cases of so-called "chronic lumbago"—I say advisedly "so-called"—the pain is localized to the sacro-iliac joints, although there is no evidence of injury or disease of these joints, and there are no abnormal physical signs to be found elsewhere. Massage, heat, bending exercises, and a potassium citrate mixture will often effect a cure.

Backache due to tearing or bruising of muscles of the back is not nearly so common in women as it is in men, but it occurs occasionally after some usually violent effort, lifting a heavy weight, or after a fall. A tender spot is found, firm pressure on which aggravates the pain rather than relieving it—just the opposite to the effect of firm pressure on a back which aches only from fatigue. I can speak from personal experience of the effect of strapping on such a back, after a heavy hunting fall. Before the application of strapping I felt that I was crippled, and hardly dared to move my back, but after being strapped I was able to operate and do anything I wanted in comparative, if not absolute, comfort. I understood then that the "red plasters" which I had applied to the backs of labourers in the receiving room of the London Hospital in days gone by had possibly had more than a mental effect.

Fatigue.

A very large number of the chronic backaches of women are due to fatigue of the back muscles, often increased by weakness of the abdominal muscles and the consequent drag of the abdominal viscera, which sag down when they are deprived of the support normally given by a sound abdominal wall. Such patients are often multiparae, in whom the effects of rapid child-bearing, with hard work, insufficient rest, nights broken by attention to the needs of babies and young children, insufficient amount of fresh air, often chronic constipation, insufficient nourishment on account of bad teeth, etc., possibly on top of a poor muscular development, result in exhaustion with chronic backache. Some of these patients say that they always get up tired. Sometimes the backache is relieved by rest in the recumbent position, but some of them say that the backache keeps them awake. To label these patients as neurasthenics does not help matters. As the late Sir Clifford Allbutt said (I forget his exact words), they have a general asthenia. Some of these patients have enteroptosis, many of them have loose kidneys, and many of them have some uterine and vaginal prolapse on account of the weakness of the pelvic floor. That they should have loose kidneys is only to be expected, as the packing of fat round the kidneys has been absorbed, but the low position of the kidneys alone will do little or no harm unless the patient is told that she has a floating kidney. I think that "floating kidney," like "ulcerated womb," is a term that should never be used to a patient. Patent medicine advertisements have so convinced the public that anything wrong with the kidneys is a cause of pain that a patient who is told that she has floating kidneys must be unusually strong-minded not to brood over this disaster and to imagine pain if she has none and to exaggerate any pain that she has. Her women friends will sympathize with her and tell her horrible stories of the effects of floating kidneys. Unless there is torsion of a loose kidney causing constriction of the vessels or ureter—really a rare condition—the low position of the kidney is usually of very little importance. Fixation operations for loose kidneys, nephropexies, which used to be performed frequently twenty years ago, have almost died out. Ventral suspension or ventral fixation for retroversion or a slight degree of prolapse, in women with

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prolapse of most of the abdominal contents, are, fortunately, rapidly dying out as well. It used to be fairly common to see a worn-out multipara with sagging abdomen and chronic backache who had had one of these operations performed, with wonderfully successful result until she returned to her household duties, but with no permanent benefit.

The ideal treatment would be a long course of rest, largely in the open air, with massage and graduated movements, and attention to all the points which had been neglected in a busy, unselfish life, but this can seldom be carried out. A well fitting abdominal belt, however, will often alter a woman's whole outlook on life. If examination of the abdomen is made with the woman standing up—the only way to examine the position of the kidneys—it will often be found that if the examiner stands behind the patient and lifts up the lower abdomen with both hands she will say at once that that gives her exactly the feeling of support which she needs. The belt must fit properly, be sufficiently deep from above down in front, take its support from the back, and lift up the lower abdomen. A few patients find extra relief from kidney pads, but their use as a general rule has been given up, as they are usually found to be unnecessary. In some cases they do harm. I have seen two or three patients who said that they were more uncomfortable after being supplied with a belt than before, and the explanation was simple—namely, they put on the belt when they were standing up and carefully pressed in the kidney pad above the kidney instead of below it. If the belt has a special kidney pad the patient must be shown how to apply it, lying down on her back and fitting the pad below the kidney.

Some of these fatigue backaches begin before marriage in girls of poor muscular development who get no outdoor exercise of any sort after they leave school. The so-called upper classes have had drilled into them at school the importance of exercise and of keeping fit, but there is an opportunity of doing some useful work in preventive medicine in the education of work-girls, shop-girls, city typists, etc. Very many of these girls have to leave home early after a hurried breakfast, with no time for a matutinal evacuation of the bowels, travel to their work by train, tube, or omnibus, spend a long day sitting over a desk or standing, and arrive home, after having a minimum of fresh air, too tired to go out again. In some of them the nature of their occupation is peculiarly liable to bring on backache—for example, sitting at and bending over a low desk or table for many hours at a time. If they marry when they are flabby, with poor muscular development, anaemic, and chronically constipated, child-bearing is only too likely to result in general fatigue with chronic backache. They ought not to have to pay this high price for maternity. Girls' clubs, with their gymnastics, Swedish exercises, and dancing, if tennis and other outdoor games are impossible, can do a great deal to improve the physique of these workers, but many girls will not join them, or find that home duties make it impossible for them to join them. If such girls can be made to believe that chronic constipation is a thing to be ashamed of, that it ought not to be treated entirely by drugs, and that exercises with the help of taking much more fluid will do much to combat it, and that a visit to the water-closet directly after breakfast is one of their most important appointments in the day, their physique will improve and their work will not make them too exhausted to be able to take some outdoor exercise when it is over. Swedish exercises, especially those which exert the abdominal muscles, skipping, and abdominal massage before dressing, will improve the condition of these girls and enable them to start the day with a feeling of *bien-être*, but even if they have the inclination to try this simple treatment they may say that they have neither the room nor the time for it.

High-heeled shoes are sometimes blamed for backache. It is probable that any man who wore high-heeled shoes would complain of backache, chiefly because he had taken to them suddenly and had to alter his balance, but the fact remains that the majority of girls and women who wear them are free from this trouble. My colleague, Mr. Robert Milne, tells me that an addition of half an inch to a woman's heels will sometimes do a good deal to relieve her backache.

Enteroptosis.

Together with, or apart from, the fatigue element backache may be caused by enteroptosis and by enlargement of the abdomen from any cause. Pregnancy, especially in multiparae, is a frequent cause of backache which makes any housework an effort and the woman's life during the last few months of pregnancy a miserable one. It is surprising to me that so few women wear abdominal belts during pregnancy. Unless a multiparous woman has unusually good abdominal muscles it must be a conservative measure to give them some artificial support. A well fitting belt will not only give much comfort during the later months, but, by preventing undue stretching of the weak muscles, will give a much better chance of recovery of tone of the abdominal muscles after labour. I cannot resist the temptation to stray a little from my subject—it is not really straying, as we cannot consider the subject of backache without paying some attention to prophylaxis—and to say a few words about prevention of a pendulous condition of the abdomen. Every woman ought to have her abdominal muscles massaged during the puerperium, from about the sixth day onwards in a normal case. If the nurse is a trained masseuse so much the better, but any intelligent woman can be shown in a few minutes how to massage the recti and oblique muscles. Massage, for ten minutes or so daily, will make the puerperal woman more comfortable, will help her to avoid flatulence and constipation, and will increase her chance of recovering the tone of her abdominal muscles. The use of a stiff binder should be forbidden, and patients should be encouraged to carry out bed gymnastics.

Tumours; Obesity.

It is obvious that large ovarian and uterine tumours may cause backache by their weight, without any inflammatory changes, as may also a large collection of free fluid, and we need not say any more about these. Much smaller tumours, such as uterine fibroids or ovarian dermoids, impacted in the pelvis, may cause backache, as well as bearing-down pain if they extend deeply into Douglas's pouch.

Very fat women, who find walking difficult and irksome, frequently complain of backache. They are caught in a vicious circle—the less they walk the fatter they become, and the fatter they become the less they walk. In some of them an abdominal mass of adipose tissue weighing 2 or 3 stone can be lifted up. If this mass is held up by a belt they may become much more active, with great benefit to their health and comfort.

Carcinoma of the Uterus and of the Rectum.

In some cases of carcinoma of the uterus backache may be of almost intolerable severity. Unfortunately, when pain in the back is present with carcinoma of the uterus the growth has usually advanced beyond the limit of surgical aid. One still sees patients with continuous bleeding whose doctors say that they had not made a vaginal examination because they saw no indication for a suspicion of carcinoma, as there was no wasting, no pain, and no offensive discharge. It cannot be emphasized too strongly that these three symptoms only too often indicate that the carcinoma is no longer confined to the uterus and that radical operation is impossible, and to wait for these symptoms before attempting a diagnosis is in many cases to wait until too late.

There is no time to say more about carcinoma of the rectum than that it must be suspected when the patient complains of severe backache from "piles," and that rectal examination is imperative in obscure cases of pelvic disease.

Disease or Infection of the Kidney.

About renal calculus, renal tuberculosis, and renal carcinoma I do not propose to say anything, as I see these conditions so seldom. Pyelitis or pyelonephritis, due to infection with the *Bacillus coli communis*, is an exceedingly common condition, and is often missed until the patient has suffered from it from a long time, while she has been having treatment for various conditions which might have caused, but did not cause, the backache. If the condition is acute or subacute the character of the pyrexia is often most suggestive. There are few other conditions in which a patient, a few hours after a severe rigor, with a temperature of 104° or so, looks well, feels well, and has a normal

or only slightly increased pulse rate. Haematuria is common in these acute and subacute cases. In many cases, however, there is little or no pyrexia, and no symptom beyond backache. Careful examination may reveal that one kidney, usually the right, is tender, and that there is tenderness along a line from the kidney to the iliac fossa, along the line of the ureter. The urine, which is always acid in reaction, may show nothing wrong on naked-eye examination, or there may be a small deposit of pus or debris when it has been allowed to stand in a conical glass, there may be an opalescent appearance, and there may be a trace of albumin. Bacteriological examination of a catheter specimen, drawn off into a sterilized bottle, will show the *B. coli communis*. It was thought, a few years ago, that pyelitis due to *B. coli* was specially common in pregnancy, but it is known now that it is extremely common apart from pregnancy. It is so common that bacteriological examination of the urine has become part of the routine examination of cases in which pain in the back is complained of and no evident cause can be found on a thorough physical examination. The treatment is simple, and, in most cases, successful in a short time. The patient must be confined to bed and kept warm, must drink large quantities of harmless fluids, and must take potassium citrate and sodium bicarbonate in moderate-sized doses sufficiently frequently to render the urine alkaline. The common practice of giving hexamine and acid sodium phosphate cannot be recommended. Pain is often increased by this acid treatment in spite of the diuresis produced by it. As soon as the urine has become alkaline the pain and pyrexia disappear in the large majority of cases. The treatment is then gradually relaxed, the urine being kept alkaline for some weeks. In only a very small proportion of cases is catheterization of the ureter with lavage of the renal pelvis necessary.

Retroversion of the Uterus.

We come now to a matter on which there has been, and still is, much controversy. Some look on almost every case in which the uterus is leaning backwards as a case for operation. At the other end of the scale are some who contend that retroversion of a normal-sized, freely movable uterus is never of any importance, and that any symptoms which may accompany it are the outcome of neurasthenia. The safe course lies between these two extremes. There is little difference of opinion about cases in which the retroverted uterus is fixed by pelvic inflammation, usually the result of salpingitis. Everyone agrees that in many of these cases there is persistent backache, increased on exertion and before the monthly periods, and that if medical measures fail, as they usually do, an abdominal operation is called for, with removal or freeing of the tubes, and slinging the uterus up in a position of anteversion. In my opinion retroversion of the uterus without any fixation is sometimes responsible for backache. I do not find, as some do, that retroversion is the cause of backache in young single women, but I find a few cases in parous women in which backache is apparently caused by retroversion of a rather bulky uterus. The backache is worse before the periods, and there is dyspareunia. The proof that the retroversion is the cause is that if a pessary keeps the uterus anteverted the backache disappears and does not return unless the retroversion recurs. In two or three cases every year I advise a round ligament operation, sometimes after a preliminary trial of a pessary, and I find that the permanent results are good. In these cases there is some subinvolution. I do not believe that uncomplicated retroversion in young single women and in the elderly causes backache or calls for operation. I think that the cases of retroversion of the uterus which cause backache would become less common if more care were taken during the puerperium to prevent retroversion. Distension of the bladder and fullness of the rectum cause retroversion and should be avoided. Before the patient gets up a pelvic examination should be made, and, if the uterus is retroverted, a ring pessary should be inserted after the uterus has been manipulated into the normal position. The pessary inserted during the puerperium will have a curative, not only a palliative, effect, and when it is removed

at the end of three months the uterus will probably be found to remain in the normal position.

Many patients are accused of having retroversion of the uterus and are given useless and possibly painful pessary treatment on a wrong diagnosis. I have been struck by the number of cases in which I have been told that rectal examination proved that the uterus was retroverted because the uterus could be felt bulging into the rectum, whereas what was felt "bulging into the rectum" was the cervix, which was pointing downwards and backwards as it should. If rectal examination of a normal pelvis is made the cervix will always be felt easily, and when the rectum is converted from a potential into a positive cavity by the examining finger the cervix appears to press against the anterior wall.

Prolapse of the Pelvic Contents.

In some cases of prolapse there is a good deal of backache, though it is not usually the chief complaint, and some patients with complete prolapse are free from backache. A word of warning must be given once more against concentrating on treatment of weakness of the pelvic floor or retroversion of the uterus in cases in which almost all the abdominal viscera as well as the pelvic organs are sagging down. Results of colporrhaphies and ventral fixation are sometimes extremely disappointing to the patient in these circumstances. Prophylaxis is as important as treatment of prolapse. Patience in the conduct of midwifery, avoidance of too early rupture of the membranes, waiting until the os is really fully dilated and the edge of the cervix pulled up, or, in some cases, pushed up above the presenting part, not simply dilated sufficiently to allow of application of the forceps, gentle traction in the right direction rather than forcible pulling if the forceps must be used, and immediate repair of lacerations, will do much, though not all, to prevent prolapse. I say "not all" because I see a few cases of prolapse, only a very small proportion, in which there has been no difficulty and no interference in labour. It is possible that general use of pelvic-muscle gymnastics during the puerperium will still further diminish the frequency of the occurrence of prolapse.

Conclusion.

Lack of time prevents me from discussing pelvic inflammation and coccygodynia as causes of backache, and also lumbago, about which most of you know much more than I do.

As I said before, I have not attempted a comprehensive survey of the whole of the subject, but I hope that I have said enough to stimulate a discussion.

THE THYROID AND MANGANESE TREATMENT:

ITS INFLUENCE ON ABNORMAL BLOOD PRESSURES.

(INTERIM REPORT.)

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WHEN first practising this therapy (described in the *BRITISH MEDICAL JOURNAL* of March 7th, p. 443) very little notice was taken of its action on blood pressure, and whenever changes occurred they were attributed to coincidence or chance. But as the treatment proceeded, and successful results were being seen in complaints usually recognized as of toxic origin, it appeared likely that some detoxicating process must be taking place in the blood as well as in the tissues generally. It was argued that the changes in blood pressure might be due to the removal of pressor or depressor agents which had, either directly or indirectly, interfered with the automatic balancing apparatus which is understood to govern the circulatory system.

During the past thirteen months careful observations and innumerable blood pressure readings have been made in between 70 and 80 cases; and the impressions recorded in this paper have been culled from the notes on these cases taken in the aggregate. But only 34 are published, as they represent abnormalities of pressure which will be