Gynaecology in General Practice

Prolapse—I, Aetiology and Diagnosis

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Old age has no monopoly of prolapse, but it has a major interest in it. For example, at Oxford there are 1,000 women of all ages waiting for gynaecological surgery and 20% of these have prolapse. Each year about 400 patients are operated on for this condition, but as reported by A. C. W. Lewis the incidence of major degrees of prolapse requiring surgery is much higher in the older age groups.¹ He reviewed a ten-year period ending on 1 January 1967, during which over 12,000 major gynaecological operations were performed. Of these, 310 (nearly 3%) were on patients aged 70–90, 190 (61%) of them being for prolapse.

The truss which supports grandfather's inguinal hernia fills a similar role to that of the pessary which holds up his wife's fallen uterus while she waits a year or more for admission to hospital. Childbearing had nothing to do with his hernia, and probably had less to do with hers (for prolapse is a hernia) than either she or her doctor imagines. If her wish to have a child was never fulfilled she wonders from the conversation of friends why it is that her womb should fall out. In the meantime a ring keeps her comfortable. It does not cure but acts as a splint just as the intact hymen preserves the dignity and adds to the comfort in her cloisters of the elderly nun whose cervix is arrested at the vaginal introitus by the unruptured membrane.

Heresies apparent in this preamble are not real, as review of the facts will confirm. Orthodox teaching and established beliefs must be reviewed periodically and challenged where necessary. This applies to many aspects of prolapse including aetiology, diagnosis, and treatment.

Aetiology

Prolapse is a common disorder, due to the mechanical breakdown, not always permanent, in the supports of any one or all of the following structures—uterus, bladder, bladder-urethral junction, pouch of Douglas, rectum, and anal canal. Spontaneous cure is sometimes associated with pregnancy, though by contrast silent damage occurring at the time of delivery is often responsible—at least in part—for symptoms many years later. A primigravida in the later weeks of gestation, with the foetal head in the pelvis, may for the first time experience pelvic discomfort and a feeling of dropping with or without stress incontinence of urine. This may be so severe that she is embarrassed. If she develops a cough it may be necessary for

her to wear protection and at night to use waterproof sheets.

Despite the severity of symptoms the condition can improve spontaneously and dramatically immediately after delivery until cure is complete. Though this sequence is not common it occurs often enough to confirm two points: firstly, just as a virgin may develop uterine prolapse so a pregnant woman may experience troublesome symptoms during pregnancy and before delivery; and, secondly, in the latter group—and sometimes when prolapse develops immediately after delivery—spontaneous cure may occur during the period of puerperal involution.

HERNIATION

The explanation of all types of uterovaginal prolapse is herniation of the relevant structure—be it uterus, bladder, rectum, or pouch of Douglas—through the supporting pelvic muscle and fascial diaphragm. Weakness may be congenital and just as a young man may develop bilateral inguinal herniae so a young woman may find her cervix protruding at the vaginal introitus. If she has never been pregnant examination will reveal the typical picture of a virginal, congenital, or nulliparous prolapse. These terms are synonymous. The condition is characterized by the uterus and vaginal vault descending with no cystocele or rectocele but carrying the pouch of Douglas with them. The condensations of pelvic fascia, especially the so-called cardinal and uterosacral ligaments, are inadequately developed and lack normal resilience. Consequently they are unable to support the uterus and vaginal vault during the normal stress of daily life, and as a result the cervix descends progressively, but usually slowly, down the vagina. In the process it becomes elongated.

NULLIPARITY

The fact that there are fewer virgins in the relevant age group than there are parous women, so that by the time a prolapse causes symptoms most patients have children in the nursery, almost certainly explains the common belief that prolapse is the result of childbirth. It sometimes is, but the uterus of many women who develop symptoms after the birth of a baby would have prolapsed at a later date had pregnancy not occurred. An experienced gynaecologist can recognize this type of prolapse and it is important that he should do so because of its relevance to both treatment and prognosis. The clinical evidence is elongation of the cervix and uterine and vault descent with minimal or no cystocele. At operation the fascia and ligaments will be thin and attenuated making a satisfactory repair more difficult and increasing the chance of recurrent trouble.

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PARITY

Most patients who complain of prolapse are parous and here the clinical picture is different. Symptoms may develop after delivery or be delayed until after the menopause, when regressive changes associated with advancing years and possibly in particular with oestrogen deficiency, are the final cause of the pelvic floor weakness. In this more common group examination of the vulva usually reveals a gaping introitus, a slack vagina with cystocele and rectocele, often a lacerated, eroded, or infected cervix, and varying degrees of uterine and vault descent. A simple recommended classification is into three stages or degrees: firstly, the uterus, pouch of Douglas, and vault descend down the vagina but the cervix remains inside the introitus; secondly, the cervix protrudes at the vulva when the patient strains; and, thirdly, this is synonymous with procidentia. The whole uterus is prolapsed outside the vulva with resultant eversion of the vagina.

CLINICAL CONSIDERATIONS

Certain important clinical points require emphasis. When a patient complains of "something coming down," she is seldom wrong. Her vulva and introitus may be normal, especially in the case of a nulliparous patient. When she is asked to strain while lying in the dorsal position there may be no evidence of cystocele or cervix. But if the same patient is turned to the left lateral position and a Sims speculum is inserted, uterine and anterior vaginal wall descent should be apparent.

Stress Incontinence

Similarly, the patient who says she wets herself when she coughs is unlikely to be wrong. Stress incontinence may not be evident in the dorsal position, but this does not necessarily mean that there is none. Precautions to take are: Before examination make sure that patient has not just emptied her bladder. The posterior vaginal wall and perineum should be depressed with the fingers or a speculum before the patient is asked to cough or strain. The effect can be dramatic, and whereas there was previously no evidence of leaking a coat may now need changing if in the line of fire. The reason is that normal levator muscles contract when the patient coughs and by elevating the bladder base prevent incontinence. When the patient stands the same stress may result in urine leaking. This is why most women with stress incontinence are dry at night in bed.

Procidentia

Contrary to common belief a procidentia is not the easiest type of prolapse to repair; in fact it is the most difficult and dangerous. It is therefore not an operation which should be entrusted to a junior trainee in gynaecology, nor performed by the occasional operator. The reasons for this are that not only is the whole uterus outside the vulva, but with eversion of the vagina and descent of the bladder the ureters are also in the protruding mass. Many a patient has suffered serious injury, and some have died, because of failure to recognize these facts.

Uterine Retroversion

It is not true that uterine retroversion is the beginning of prolapse, though sometimes it may be. Slackness of the liga-

ments leading to retroversion can indicate more widespread pelvic floor weakness predisposing to herniation. Many patients with a considerable degree of uterine prolapse have no retroversion, and conversely most patients with a retroverted uterus have no prolapse.

Diagnosis

This is usually easy, and many practical points have been mentioned already. Two additional ones are worth mentioning. Firstly, the degree of prolapse found at examination is not necessarily correlated with the severity of the symptoms.

Considerable prolapse is often seen in patients who maintain they are symptom-free, just as others with minimal prolapse claim to be severely distressed by symptoms such as a sense of something falling out; a lump at the vulva which is always worse on standing or straining and usually disappears when the patient lies down; frequency, stress or urgency incontinence; and occasional retention. The last is usually associated with second or third degree prolapse, and the patient learns to replace the extruded mass into the vagina if she cannot pass urine.

Similarly emptying the rectum can be difficult when there is a large rectocele or enterocele. The patient may confess, with an expression of unnecessary shame, that before she can empty her bowel she has to push the "lump" back into the vagina and hold it there with her fingers. Dyspareunia and loss of libido are often admitted on questioning but seldom complained of. Backache is rarely a symptom, though dragging discomfort in the sacral area and thighs may be associated with severe prolapse. The patient who is symptom-free, though considerable prolapse is found on pelvic examination, presents a special problem, which will be discussed in next week's article.

DIFFERENTIAL DIAGNOSIS

With careful examination the differential diagnosis of prolapse is not a problem. Vaginal cysts, usually arising from Wolffian remains, may be found in the midline of the lower third of the anterior vaginal wall or laterally in the upper vagina. Their covering is smoother than that over a cystocele because the vaginal rugae are flattened over the cystic tumour, and on pressure cysts do not disappear as a cystocele does. The same applies to a urethral diverticulum, except that under pressure it usually empties slowly and fluid—including pus—may escape from the urethra.

Solid tumours in the anterior vaginal wall are almost invariably in the lower third. They are relatively rare and usually malignant, most being metastases from a uterine tumour. The latter is usually an endometrial carcinoma or a chorioncarcinoma. Occasionally an invasive hydatidiform mole will have a secondary deposit beneath the urethra. Both the mole or the chorioncarcinoma are blue in colour and should never be mistaken for a cystocele. Cysts on the posterior vaginal wall simulating a rectocele are rarer and are usually the result of a haematoma following childbirth or trauma or of epithelial inclusions forming a dermoid cyst.

(Part II will appear in next week's B.M.J.)

Reference

- Lewis, A. C. W., *Journal of the International Federation of Gynaecology and Obstetrics*, 1968, 6, 244.