single infection and a fourfold increase in ectopic pregnancy.⁹ Put another way, the risk of tubal block is 1.26 per 100 women years. Actinomycosis is seen with the prolonged use of plastic devices but is unlikely with copper bearing coils.¹⁰ Use of intrauterine contraceptive devices increases the risk of ectopic pregnancy to 1.3 per 100 women years but this increase is restricted to women who have had salpingitis.⁹ Increases in the rate of ectopic gestation should probably be attributed to the sexual activity which leads to salpingitis rather than the intrauterine contraceptive device itself.

The new generation of intrauterine contraceptive devices have lower problem rates.¹¹ The Nova-T and Multiload 250 have pregnancy rates of less than 1 per 100 woman years after one year, rising to cumulative rates at three years of 2.0 and 1.2 per 100 woman years respectively. The rates of expulsion are highest in the first year, but at three years total only 7.0 and 2.6 per 100 woman years respectively for all parities (4.8 for nulliparas with the Multiload 250). Removals for pain or bleeding at three years total 19.9 per 100 woman years for the Nova-T, and even in nulliparas only 7.9 per 100 woman years for the Multiload 250.^{12,13} No deaths have been reported in Britain from the association of sepsis and spontaneous abortion linked with intrauterine contraceptive devices, presumably since gynaecologists in Britain usually remove low lying devices in early pregnancy. The highest rate of pain after insertion, of moderate or severe degree, occurs in up to 11% of women with the Multiload, which is a wider device.¹⁴

This adds up to an extremely low risk of complications: even for nulliparas. The main anxiety is the risk of infertility in nulliparous women. This and the other problems might be reduced by changes in practice. Infection occurs because organisms are introduced either at insertion¹⁵ or by ascent up the tail of the intrauterine contraceptive device.¹⁶ Inserting a tailless device through a sterile cervix would reduce infection, as would using devices with longer periods of recommended use,¹¹ which require fewer problem causing replacements. Expulsion rates may be reduced by using smaller devices for women with small uterine cavities.¹⁷ Pain during insertion may be reduced by psychological preparation of the patient¹⁸ or by local anaesthesia. Perforation may be reduced by training inserters,¹¹ the use of a tenaculum, and by avoiding plunger like insertion techniques.¹⁹

The hazards of the intrauterine contraceptive device have been overestimated. The use of tailless devices and either bacteriological screening of the cervix before insertion or antibiotic prophylaxis at the time of insertion should now be studied to see whether the problems of this method of contraception can be reduced further.

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Dyspareunia

Dyspareunia—difficult and painful sexual intercourse—is a symptom and not a disease. Furthermore, it is a symptom of which the patient may not complain even though it is the main cause for her consultation: the real issue may be elicited only by direct questioning.

Textbooks often still divide the causes of dyspareunia into physical and psychological, yet such a division is not necessarily valid. A vicious circle may arise such that any pain during intercourse will cause anxiety and inhibit arousal, and the resultant lack of lubrication causes further pain. The underlying cause must be elicited accurately if treatment is to be successful.

Quite often the cause will be easily detectable by establishing the position of the pain and its time of onset—though such an approach also carries a risk of being too simple. Primary superficial dyspareunia, for instance, may be due to a rigid hymen, whereas secondary superficial dyspareunia may be due to infection or a poorly repaired episiotomy. The once common practice of repair of episiotomies by medical students is no longer acceptable, for an episiotomy which is either too tight or results in a bridge of skin at the introitus unsupported by underlying muscle may cause great distress.

Another possible cause of secondary dyspareunia is vaginitis, even if the patient has not noted the discharge; in women between 15 and 50 it is generally due to *Candida* and less frequently *Trichomonas*. Narrowing of the vagina associated with atrophic changes may be real in postmenopausal women, or apparent and due to spasm of the levator ani muscles in younger women. Such spasm is best felt along the posterior vaginal wall and may be shown to the patient. Atrophic changes (provided that they are not too long standing) generally respond to local or systemic treatment with oestro-

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² Newton J, Szontagh F. A collaborative study of the progesterone intrauterine device (Progestasert). *Contraception* 1979;**19**:575-89.

³ Smith PA, Ellis CJ, Sparks RA, et al. Deaths associated with intrauterine contraceptive devices in the United Kingdom between 1973 and 1983. *Br Med J* 1983;**287**:1537-8.

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⁵ Tietze C, Lewit S. Evaluation of intrauterine devices: ninth progress report of the co-operative statistical program. *Stud Fam Plann* 1970;**55**:1-40.

gens, whereas levator spasm may respond to counselling of the patient (and possibly her partner) on sexual technique.

Physical signs should not, however, always be taken at face value. Levator spasm may be a protective mechanism in a patient with a tender pelvic lesion, while an intact hymen should not necessarily be accepted as the cause of superficial dyspareunia—it may simply be the effect of non-consummation, the cause of which must be sought elsewhere.

Deep dyspareunia may be primary, when it is classically associated with retroversion of the uterus, or secondary, when it is associated with pelvic disease. Pain on deeper pelvic examination, reproducing the pain of intercourse, may arise with pelvic inflammatory disease, endometriosis, or uterine enlargement due to adenomyosis or fibroids. Examination will be highly informative in these circumstances, but it will be valueless if the patient is not at her ease. Endometriosis is generally suggested by other features such as dysmenorrhoea, especially during the menstrual flow, midcycle pain, and the classic pelvic finding of numerous small tender nodules on the uterosacral ligaments, but the absence of these features does not necessarily exclude the diagnosis. Indeed, in this condition, frequently found in low parity women of the higher social classes, the severity of symptoms may be out of proportion to the degree of disease, and only direct visualisation of the pelvis by laparoscopy may give a final verdict. This procedure is often performed for deep dyspareunia in the absence of other physical signs, but like all surgical procedures it has a risk: the death rate is one in 12 500 laparoscopies.¹

The presence of a retroverted uterus may bring the ovaries into a vulnerable position in the pouch of Douglas resulting in dyspareunia. Retroversion itself, however, is not indicative of disease provided that the uterus is mobile, and the once widespread surgical panacea of ventrosuspension to place the uterus in anteversion has lost popularity because the results have been disappointing. With careful clinical assessment, however, some patients may be identified who would benefit from this procedure, and in such cases the results may be gratifying. Before surgery is tried the patient should be advised to experiment with different positions of intercourse as she may well find one which is free from pain.

Dyspareunia should not be labelled as psychogenic purely because no physical cause has been found. Further evidence is required such as the patient's opinion of coitus, her sexual history, the state of her marriage, and her mental state. Depression is a potent cause of dyspareunia, as is marital disharmony, fear of pregnancy, or even memory of an unpleasant vaginal examination or sexual experience. One rapid interview at a busy gynaecological clinic may well be inadequate to elicit this background, whereas the investment of time and patience by the clinician should reap rewards. If no answers are forthcoming the next step is for psychosexual counsellors to interview both the patient and the partner, separately and together, the interview itself possibly providing the treatment necessary for a successful outcome. Patients remain singularly unconvinced by techniques such as vaginal dilatation under general anaesthesia, and in fact such procedures focus the patient's attention on the physical rather than the psychological aspect of her problem with resultant reinforcement of her view that "she is small down there." A gentle vaginal examination, preferably augmented by the patient learning to explore herself using either fingers or vaginal dilators, may help to satisfy her about the normality of her vaginal dimensions. Behavioural therapy, where appropriate, requires a gradual relearning of sexual behaviour in which anxiety is alleviated by forbidding intercourse and

advising the couple on a series of "exercises," starting with kissing and touching fully dressed, gradually advancing through various types of stimulation and ultimately to intercourse—the so called "sensate focus" technique.²

Recently a "new" cause of secondary introital dyspareunia has been described at the Johns Hopkins Hospital associated with the appearance of punctate erythematous foci immediately lateral to the hymenal ring.³ Woodruff and Parmley believe that this is due to chronic inflammation of minor mucus secreting glands at the junction of the labial and vaginal skin. They claim good results from excision of this skin in a Y shaped area with the arms extending bilaterally almost to the urethral meatus and the stem down on to the perineum with primary resuture using chromic catgut; 15 such patients, aged 22 to 39 years, were treated and 14 apparently cured on short term follow up. I believe that I have seen only one such case, but again treatment along similar lines was apparently curative. As with any new procedure caution is needed in selecting patients, and long term results will need to be assessed before too many willing patients undergo possibly unnecessary surgery just because there is nothing else to offer. Sadly, there will remain, as in so many branches of medicine, a hard core of patients for whom we have nothing to offer but sympathy and support.

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¹ Royal College of Obstetricians and Gynaecologists. *Gynaecological laparoscopy*. London: Royal College of Obstetricians and Gynaecologists, 1978:116.

² Masters WH, Johnson VE. *Human sexual inadequacy*. London: Churchill Livingstone, 1970.

³ Woodruff JD, Parmley TH. Infection of the minor vestibular gland. *Obstet Gynecol* 1983;**62**:609-12.

Life changes

We do not always know what really brings a patient to the doctor. But whatever the complaint, behind it often lies some disturbance in the normally smooth pattern of day to day existence that reduces the patient's tolerance of symptoms and his capacity to cope.¹ Paying attention to this background disturbance sometimes makes better sense of the consultation for both doctor and patient (and may offer more rewards) than concentrating on foreground symptoms. Of the many possible influences, one of the most powerful is a life change—a psychosocial step or transition which alters a person's relation to the world about him and demands new responses.

Such changes may lead to better adjustment or may precipitate failure or breakdown.² They may be directly related to phases of growth and development, as at puberty or menopause; to socially ordered events, such as going to school, getting married, or losing a job; or to a mixture of both—the first lover, the first child, a serious bereavement.³ An illness may arise and itself cause further changes in lifestyle. Attendances at surgeries cluster round these moments, and they demand understanding and appropriate help. The child in care comes with abdominal pain, the divorcee with indigestion, the elderly widow with painful knees. The isolated young mother presents her child with a cold, the newlywed