MEDICAL PRACTICE

Gynaecology in General Practice

Dysmenorrhoea

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Though there is no reason to suspect that nowadays fewer women suffer discomfort or pain or both at the time of menstruation, over the past 20 years the numbers referred to gynaecological clinics has fallen dramatically. This may reflect that either fewer women are actually seeking medical advice or that better proprietary pharmaceutical preparations are available to the public or prescribed by the practitioner. Without adequate statistical support one suspects that this is due to a combination of these factors. This decrease in incidence is also influenced by the improved education of young girls on all matters of sex and a correct outlook on menstrual function and its management by both parents and teachers. Indeed, this may well be one of the fringe benefits of the emancipation of women and equal rights.

Some women still have to attend the practitioner because their pain is sufficient to interfere with their normal activities and work. While patients with dysmenorrhoea complain of pain only at the time of menstruation, the practitioner usually tries to classify it into one category or another. Some recognize three main types: (a) spasmodic or true dysmenorrhoea, (b) congestive, or (c) due to endometriosis; while others prefer to distinguish between primary dysmenorrhoea (a complaint occurring in young girls or women up to the age of about 25) and secondary dysmenorrhoea, when the pain results from some local pelvic disease such as salpingitis or endometriosis, and arises in the over 30-35 age group after some time free of painful periods. In essence, both classifications distinguish between a dysfunctional cause and a pathological cause(s).

During menstruation and for a few days preceding it there is a tendency to emotional upset and a lowering of general efficiency, varying in degree with the nervous make-up of the

individual. These factors alone may lead the patient to exaggerate her discomfort, and the general practitioner has to decide whether there is really dysmenorrhoea or not. Some girls experience dysmenorrhoea because they are brought up to regard periods as "poorly times," during which discomfort is expected. This outlook can be fostered by over-anxious parents—especially of an only child—by curtailment of normal activities during menstruation, and by a false sense of uncleanness which may give rise to feelings of disgust and revolt or other psychological reactions. Circumstances which lead to nervous tension can make dysmenorrhoea worse, even if they do not cause it, and these include unhappiness at home or work, fear of losing a job, and anxiety over examinations. To some extent the more enlightened upbringing today has reduced some of these factors. The individual practitioner with his first-hand knowledge of both the personal and family background can often help this small group of patients by providing an understanding, sympathetic, and reassuring attitude alone.

Spasmodic or True Dysmenorrhoea

Spasmodic or true dysmenorrhoea is the commonest form of severe dysmenorrhoea. It dates from at least a year or two after menstruation begins and seldom has an organic basis. Nearly always it disappears spontaneously after 25-30 years of age or following pregnancy. The pain begins on the first day of menstruation—never premenstrually—and lasts for a few hours to a day. It may, however, be of great severity while it lasts and resemble colic. During a severe attack the patient looks drawn and pale and may sweat; nausea and vomiting are common and the patient may faint. Bladder or rectal tenesmus may occur and there may be diarrhoea. The pain is felt mainly in the hypogastrium and radiates to the inner and front aspects of the thighs; it never extends below the knee or to the back of the leg. There may be some low backache but this is not the dominant sensation. Many of these features suggest an upset in the autonomic nervous system, but the

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precise aetiology of the condition is unknown. It should be emphasized that there are usually no abnormal physical signs on pelvic examination.

CAUSES

Abnormal Uterine Action

The cause of the pain is thought to be due to uterine contractions, probably as a result of some incoordination of uterine activity which leads to muscular ischaemia rather than of the intensity of muscular contractions. If this is true then the mechanism for the pain is comparable to that of angina pectoris. Alternatively the pain may arise from tension in the cervix. Obviously since all pain has a cerebral component it may serve to exaggerate the symptoms, but by itself it does not cause dysmenorrhoea.

If we accept some form of abnormal uterine action then we must consider the possible causes which have been suggested. Uterine hypoplasia is not acceptable for many reasons, since in cases of proved hypoplasia the incidence of dysmenorrhoea is low and in cases of severe dysmenorrhoea the actual incidence of hypoplasia is small. Cervical obstruction is also not acceptable, because a pinhole os is rare and again, when present, the incidence of dysmenorrhoea is low. On the other hand, the most acceptable cause for the abnormal action appears to be a combination of a neuromuscular incoordination and hormonal imbalance. An upset in the autonomic nervous control of muscle, in which an overactive sympathetic system leads to hypertonus of the circular fibres of the isthmus and internal os, may play a part. Since dysmenorrhoea occurs only in ovular cycles, progesterone is implicated, as it induces a high tone in the isthmus and upper cervix, including the internal os. This combined theory explains the close relation between dysmenorrhoea and ovular cycles and also why the complaint is cured by permanent dilatation of the cervix, obstetrically or by surgical dilatation.

Passage of Clots

There may be other or additional causes of spasmodic dysmenorrhoea. The passage of clots is rarely seen, except with menorrhagia, when the symptoms are not usually as severe as those which occur in idiopathic dysmenorrhoea. The pain in these cases will generally occur immediately before the appearance of the clot. The treatment, of course, is related to the underlying menorrhagia.

Submucous Fibroid

The passage of a submucous fibroid or endometrial polyp may occasionally be a cause of dysmenorrhoea, but as a single episode rather than recurrent attacks.

Cases of "membranous dysmenorrhoea" are of interest when seen but are rarely met. Occasionally it is a familial condition and related to the passage of large pieces of endometrium or a cast of the uterus.

Malformation of the Uterus

Not uncommonly these patients have a high incidence of spasmodic dysmenorrhoea especially when the uterus is bicornuate or septate. The reason for this is that the unequal development of the Müllerian ducts for the unicornuate and double uterus are less likely to cause symptoms. Each half of the uterus gives rise to pain referred to its own side of the abdomen, and when one horn is at fault the dysmenorrhoea is unilateral. One-sided spasmodic dysmenorrhoea in young girls should always raise the possibility of a uterine malformation.

When a rudimentary horn causes pain it is usually because it does not communicate with the uterine cavity and the out-flow of blood is obstructed; in these cases the rudimentary horn is best excised. With this exception the treatment of these patients is the same as that for spasmodic pain arising in a normal uterus. Reconstruction operations on bicornuate uteri give poor results as far as dysmenorrhoea is concerned.

MANAGEMENT AND TREATMENT

The patients should be reassured that nothing is wrong and that their symptoms will settle in time. They may have to take things easily or lie down at the peak of their discomfort, but with reasonable treatment this should not happen regularly. If indicated an effort should be made to improve the patient's general health and increase her physical activity.

Analgesics

Analgesics are usually required to some extent by most women who do not seek advice and almost invariably by those who do seek medical advice. Acetyl salicylic acid and phenacetin and codeine, alone or in combination (proprietary or non-proprietary), are the most commonly used analgesics. Several preparations or combinations may have to be tried to find the most suitable for each patient. Habit forming drugs which give definite relief of pain such as pethidine or morphine should never be used for the treatment of spasmodic dysmenorrhoea. An important principle in the use of analgesics is to make sure that a relatively large dose is given initially, so that the patient gets relief and thus has confidence in the treatment prescribed, and is then, of course, followed by smaller doses.

Antispasmodics

Other preparations used in the past have included antispasmodics, usually containing amphetamine and related compounds, and preferably taken together with analgesics. Since most women are unaware of the nature of the drug they are receiving and since these preparations are likely to be used for only one or two days at monthly intervals, they are unlikely to be misused even if required for a year or two. Nevertheless, in view of the recent pressure to restrict severely the prescribing of amphetamines and amphetamine-containing substances, probably this type of antispasmodic will be used much less in the future. Alternative preparations are Buscopan (hyoscine-N-butylbromide), one or two 10-mg tablets three or four times daily, or Bellergal (belladonna, ergotamine, and phenobarbitone), one or two tablets three times daily.

Hormone Therapy

The place of hormone therapy as a diagnostic test to determine the effect of inhibition of ovulation and to some extent determine the extent of any cerebral cortical effect on the dysmenorrhoeic pain is well established. Its role as a prolonged therapeutic measure for dysmenorrhoea itself is debatable. If there are additional features, such as menorrhagia or a desire to avoid pregnancy on the part of the patient, then it is perhaps justifiable. The relative benefits of relief of symptoms, especially if time has to be taken off work, has to be balanced against any potential or actual side effects of the treatment prescribed. The decision will often be a joint one between the patient and her practitioner, and if agreed then the patient needs to be seen at regular intervals.

With regard to the individual hormones, testosterone and its derivatives should be avoided because the dangers of

virilism are too great. Oestrogens are good as a diagnostic measure if they stop ovulation and can be given from the fifth day of a cycle for 15 days. The synthetic progestogens are especially useful for suppressing ovulation, especially if combined with oestrogen (in effect the "pill," though it may be marketed under a different name). Pure progestogen preparations are sometimes recommended but are not usually so successful in relieving symptoms.

If hormone therapy with the synthetic progestogens is tried for three menstrual cycles usually there is some relief with the first course of treatment (in other words, for three weeks beginning on the fifth day of the cycle). The second and third courses are more effective, and sometimes there is complete relief of symptoms. Most patients who have no other need for continuing hormone therapy in the form of the "pill" are reassured that their symptoms are related to ovulation. The knowledge that they can obtain relief, for a particular event such as examinations, is in itself reassuring. These patients are usually quite content to return to some form of analgesic or antispasmodic therapy or both.

Surgical Treatment

In some cases medical treatment may fail, and if the patient's symptoms are genuine and mean she misses work, for example, then surgery should not be deferred too long. An examination under anaesthesia will help to reassure the patient that all is normal, if not normal then appropriate treatment can be instituted. At the same time the cervix will be dilated, and this is usually all the surgery required. The principle is to stretch the fibromuscular tissue at the internal os to make it atonic. There is, however, the danger of cervical laceration if the operation is too enthusiastic. In general the operation cures about 60% and improves 20% of patients. Nevertheless, the pain may return in six months to two years.

If there are no abnormal findings, other surgical treatment is rarely indicated. At one time there was a vogue for pre-sacral neurectomy, but this is now rarely carried out. The rationale for the operation was to eliminate the motor impulses, increase vascularity, and interrupt the sensory pathways. One recognized complication of this operation, however, is the development of another symptom—namely, menorrhagia.

Secondary Dysmenorrhoea

Secondary dysmenorrhoea, which frequently starts after 35 years of age, includes dysmenorrhoea of the congestive and endometriotic types.

CONGESTIVE DYSMENORRHOEA

In congestive dysmenorrhoea the abdominal discomfort occurs a few days before a period and is relieved by the menstrual flow. The pain is probably due to increasing tension in

or around the pelvic tissues. Usually there are other symptoms present, and in particular menorrhagia. The usual causes of this type of dysmenorrhoea are pelvic inflammatory disease and over-anxiety (often part of the premenstrual tension syndrome). If the cause is pelvic inflammatory disease the usual analgesics and antispasmodics should be used supplemented in many cases by antibiotics and anti-inflammatory agents. Heat in the form of short-wave diathermy is often helpful as a temporary measure. If the symptoms continue and are severe then surgery may have to be seriously considered, especially if child bearing has been completed. In these cases surgery is more often radical in nature because of the many symptoms.

If the cause is part of the premenstrual tension syndrome then it is worth trying the effect of reducing salt and fluids premenstrually.

ENDOMETRIOTIC DYSMENORRHOEA

Dysmenorrhoea due to endometriosis and adenomyosis classically occurs in women over the age of 35, though it may be encountered at much earlier ages nowadays. Secondary dysmenorrhoea developing in patients of 30-35 or more always suggests the possibility of endometriosis. Sometimes a patient who has spasmodic dysmenorrhoea when young develops endometriosis, and the changeover from one type of pain to another passes unnoticed. The pain of endometriosis will of course vary with the site of the lesion. The pain begins 2-3 days before the period and continues throughout, reaching a climax during or at the end of the period when the endometriosis is menstruating into itself. Unlike spasmodic dysmenorrhoea the pain persists for several days and ceases completely only after the period is over, when some of the menstrual exudate is absorbed.

Treatment

The treatment of these patients depends to some extent on the amount of endometriotic tissue, the severity of their dysmenorrhoea and other symptoms, and whether or not infertility is one of their symptoms. During pregnancy endometriotic tissue degenerates, possibly because the decidual reaction induced in the ectopic endometrium makes it more readily absorbable. It is therefore current practice to induce pseudopregnancy by giving the synthetic progestogens continuously for six to nine months. The results are usually very gratifying, especially the relief of their dysmenorrhoea. Sometimes the diagnosis is not made until a laparotomy is performed, in which case limited (conservative) surgery with resection, excision, or diathermy of the endometriotic nodules is followed by hormone therapy for six to nine months.

The internal form of endometriosis (adenomyosis), in which the tissue is confined to the uterine muscle, is usually associated with severe dysmenorrhoea. This does not respond to hormone therapy; the uterus is often two to three times the normal size, and a hysterectomy is the only cure.