Clinical Algorithm

Pelvic pain in women

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All women at some time experience pelvic pain associated with physiological events such as menstruation, ovulation, or sexual intercourse. Only a few women seek medical advice for such pain, yet it is the commonest reason for laparoscopy in Britain.¹ In three quarters of cases no cause is found, but the reason for this is not clear. People's perception of pain varies, and women with unexplained pelvic pain have often been diagnosed as suffering from psychogenic pain. Certainly, the incidence of anxiety and depression is high in women with unexplained abdominal pain,^{2,3} but in some cases the pain may be due to genuine but unrecognised disease. For example, we and others have reported the consistent finding of pelvic varicosities in women who have often complained of a chronic dull ache in the pelvis (Adams J, *et al*, 24th British Congress of Obstetrics and Gynaecology, 1986).³ We have called this the pelvic pain syndrome. Many of these women have a history of serious disturbance to their normal emotional development in childhood,⁴ which may in some way underlie the subsequent development of varicosities. Whatever the cause, high levels of anxiety or depression certainly increase the severity of their pain.

Thus it is clear that the diagnosis and management of pelvic pain are not as simple as is sometimes believed. Severe pain is not necessarily caused by obvious organic disease just as women who complain little of pain may have serious disease. It therefore pays to investigate the patient fully before making a diagnosis.

Classification

Many conditions cause pelvic pain, and a classification is of little practical use other than to remind the clinician of the possibilities to be considered.

Problems of pregnancy—abortion, ectopic pregnancy, round ligament pain, degeneration of fibroids, unexplained uterine pain.

Menstrual cycle—dysmenorrhoea, mittelschmerz.

Infection—pelvic inflammatory disease.

Urinary tract—cystitis, calculus, urethral syndrome.

Large bowel—carcinoma (rare), ulcerative colitis, diverticulitis, irritable bowel syndrome.

Genital tract—torsion, degeneration and haemorrhage into cyst, endometriosis, fibroids, prolapse, pelvic pain syndrome (varicosities).

Musculoskeletal—prolapsed intervertebral disc, spondylolisthesis.

Diagnosis

History—A clear history of the nature of the pain, its site, factors which exacerbate and alleviate it, and its timing should be obtained. Pain caused by bleeding from an ectopic pregnancy or torsion of an ovarian cyst is strikingly different from that due to more chronic conditions. Thus the diagnosis of an acute abdominal incident necessitating immediate laparoscopy is not difficult. Occasionally, however, pelvic pain syndrome may present as severe lower abdominal pain mimicking an acute gynaecological emergency. The longstanding pain of endometriosis, recurrent pelvic inflammatory disease and pelvic varicosities is more difficult to diagnose, although the patient's history may be helpful. Unpublished data from our studies show that women suffering from pelvic pain syndrome have several symptoms, are more likely to admit to sexual problems which predate the onset of pain, are taking greater quantities of drugs, and have more hospital referrals than patients with proved organic disease.

Site of tenderness in the pelvic pain syndrome. x = the ovarian point, which is located at the junction of the upper and middle thirds of a line drawn from the anterior superior iliac spine to the umbilicus.

Examination—Typically, women with pelvic pain syndrome look unhappy and they often resent questioning. In gynaecological emergencies abdominal examination is helpful when the site of tenderness is localised with or without rebound tenderness. With chronic pain the site of tenderness is more difficult to identify. In pelvic pain syndrome, however, pressure over the ovarian point (see figure) produces pain in the pelvis identical to that of which the patient complains. Pelvic venography shows that the reason for this is probably compression of the ovarian vein over the transverse processes of the lumbar vertebrae, which results in back pressure on the plexus of veins at the hilum of the ovary. Vaginal examination is essential to assess the size of the uterus and to detect pelvic disease.

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Pelvic pain

In pelvic pain syndrome the cervix is often blue due to engorgement, and the pelvic organs, particularly one or other of the ovaries, are tender on gentle pressure.

Investigation

Further investigation may not be necessary if the diagnosis is obvious, but increasingly laparoscopy is being used before resorting to laparotomy. This is particularly important with a diagnosis of pelvic inflammatory disease based on clinical findings as it is often disproved on laparoscopy. Pelvic varicosities with polycystic ovaries may be found in an otherwise normal pelvis. Polycystic ovaries can be confirmed with ultrasound scanning and varicosities in the broad ligament or the infundibulopelvic ligament with venography and ultrasound scanning (Adams J, *et al*, 24th British Congress of Obstetrics and Gynaecology, 1986).

We have recently described the routine use of Pelvic venography—in women with suspected pelvic pain syndrome.⁵ A normal venogram excludes pelvic pain syndrome as a cause of chronic pelvic pain and encourages the doctor to look for another cause.

Treatment

The algorithm shows the management of women with pelvic pain. Surgery is increasingly being replaced by medical treatment, even

for conditions such as endometriotic “chocolate” cyst of the ovary. The treatment of pelvic pain syndrome is still in its infancy, but the success of non-directive counselling and relaxation training suggests that psychotherapy is likely to remain a cornerstone of treatment.⁶ Recently preliminary results have suggested that suppression of ovarian activity with medroxyprogesterone acetate (Provera) brings about complete relief of pelvic pain syndrome (Reginald PW, *et al*, 24th British Congress of Obstetrics and Gynaecology, 1986), but a prospective trial is needed to confirm this.

Results of surgery are disappointing.⁷ Surgery is also inappropriate in most cases, not only because most sufferers are in their reproductive years but also because removal of any pelvic organ tends to reinforce these women's feelings of inadequacy.

References

- 1 Chamberlain G, Brown JC, eds. *Report of the working party of the confidential enquiry into gynaecological laparoscopy*. London: Royal College of Obstetricians and Gynaecologists, 1978.
- 2 Gomez J, Dally P. Psychologically mediated abdominal pain in surgical and medical outpatient clinics. *Br Med J* 1977;ii:1451-3.
- 3 Magni G, Salmi A, Leo D, Ceola A. Chronic pelvic pain and depression. *Psychopathology* 1984;17:132-6.
- 4 Duncan CH, Taylor HC. A psychosomatic study of pelvic congestion. *Am J Obstet Gynecol* 1952;64:1-12.
- 5 Beard RW, Highman JW, Pearce S, Reginald PW. Diagnosis of pelvic varicosities in women with chronic pelvic pain. *Lancet* 1984;ii:946-9.
- 6 Pearce S, Beard RW. Chronic pelvic pain. In: Broome A, Wallace L, eds. *Psychology and gynaecological problems*. London: Tavistock Publications, 1984: 95-116.
- 7 Rенаer M. *Chronic pelvic pain in women*. Springer-Verlag: Heidelberg, 1981: 175-6.

MATERIA NON MEDICA

Student grouse

The recent complaints of poverty from the student body have reminded me of the hardships formerly experienced by university students, especially in Scotland. In the nineteenth century many students, driven by ambition or zeal for learning, often came from the homes of poor farmers, cottars, and country clergymen. Parents made great sacrifices to support their sons, but often these could afford only a meagre diet and lived in cold and poorly lit lodgings, often succumbing to tuberculosis and other infectious diseases. My grandfather, when a student at Edinburgh in the 1860s, survived in good health by receiving a fortnightly hamper containing oatmeal, oatcakes, cheese, butter, and eggs, with a consignment of clean linen. (This amused the more affluent English students, especially the arrival of what they called “horses’ corn meal.”) During vacations my grandfather returned to Aberdeenshire to work on his father's farm.

My own experiences of work during vacations in a later era were not very arduous. On one or two occasions, however, I did join a team of student beaters on the grouse moors behind Glen Muick, an estate neighbouring Balmoral. We earned, if I remember rightly, four shillings a day. We started early each day making a wide sweep round hills and valleys, driving grouse in the direction of the butts. The guns, mostly officers of the Scots Guards, sometimes had well mannered arguments about any bird which fell midway between the butts. One day the Duke of York, later George VI, joined the party; he was a good shot but apparently not as good as his father George V, whose exceptional ability had obviously impressed the local keepers. Lunch for the gentry arrived on ponies with panniers, and while they consumed whisky and other delights we munched our sandwiches at a respectful distance and drank water from one of the highland burns.

After a tiring day we returned to our base camp late in the afternoon for a generous meal cooked by the head keeper's wife. This satisfied us till mid evening, when we became hungry again and repaired to Ballater for a further instalment of food.

From Glen Muick the contours of Lochnagar dominated the southwestern skyline and seemed to beckon us there. So one evening, not content with our exertions pursuing grouse, eight of us set out without food or warm clothing to climb this mountain with the idea of seeing the sunrise. We walked the eight miles to the foot and climbed to the summit by a rugged path. Soon after our arrival a dense mist enveloped us and having no desire to fall over what Byron described as “the steep frowning glories of dark Lochnagar” we lay down in a huddle and spent an uncomfortably cold night waiting for the

dawn, not caring whether or not the sun rose. Chastened and hungry we returned to our base and fell upon a huge breakfast.

When we told the Guards officers of our exploits they thought we were crazy. Perhaps they were right—or were they?—PETER BEATTIE, Norwich.

What treatment is advised for idiopathic tinnitus? Does carbamazepine have a place in treatment?

There is no specific treatment for idiopathic tinnitus which has been well supported by properly controlled studies and which is aimed specifically at abolishing the symptom. Effective treatment is aimed at reducing the secondary symptoms caused by the tinnitus and facilitating the habituation to the condition. Within this context there are three main lines of management: (a) acoustical, (b) psychological, and (c) pharmacological.

Acoustical consists of fitting a hearing aid or aids in patients with tinnitus and associated hearing loss, considering a masker fitting in patients with tinnitus but no hearing loss, and also possibly considering a combined instrument that has the attributes of both a masker and a hearing aid in others. In addition considerable advice on manipulating environmental noise may be helpful. *Psychological techniques* are mainly focused on relaxation approaches, although some work has been done on biofeed back and cognitive restructuring. *Pharmacological approaches*: the only drug really effective in repeated controlled studies is intravenous lignocaine, which can be used only as a test drug. Several other epileptic drugs including carbamazepine have been tried and may help certain individuals but not others; overall the response rate has been disappointing. If the patient suffers from endolymphatic hydrops (Menier's disorder), either primary or secondary, antihydrop drugs such as cinnarizine may be useful. If the tinnitus has been precipitated by or has actually caused symptoms of anxiety or depression appropriate medication may be useful in these cases. Among the benzodiazepines, clonazepam and oxazepam appear to be particularly useful.¹⁻⁵—S D G STEPHENS, consultant in audiological medicine, Cardiff.

Lechtenberg R, Schulman A. Benzodiazepines in treatment of tinnitus. *J Laryngol Otol* 1984; suppl 9:271-6.