

than to the term "emotional problem" or "psychological problem," and Berger *et al*<sup>4</sup> emphasise that the doctor must explain that such pain is no less real than pain of organic origin. In the final phase of the interview the physician explores with the parents ways in which they can help the child to become more independent and better able to cope with stress and with his pains so that he is able, and expected, to enter into normal activities for his age, both pleasurable ones and chores.

Using this type of approach the Philadelphia paediatricians successfully treated 60% of children referred to them with recurrent abdominal pain. The other 40% they referred to a child psychiatrist, but even in those cases they believed that their initial approach had paved the way for more successful psychiatric intervention. Patients in this series were followed up for less than two years, so that the long-term value of the treatment is not known. Apley<sup>3</sup> referred only 10% of his patients to a child psychiatrist. Long-term (10-14 years) follow-up of his patients not so referred showed that, although persistence of symptoms was equally common in those untreated and those given "informal psychotherapy," the treated group could cope better with their symptoms and were less restricted in their activities.

<sup>1</sup> Bain, H W, *The Pediatric Clinics of North America*, 1974, **21**, 991.

<sup>2</sup> Bayless, T M, and Huang, S, *Pediatrics*, 1971, **47**, 1029.

<sup>3</sup> Apley, J, *The Child with Abdominal Pains*, 2nd ed. Oxford, Blackwell, 1975.

<sup>4</sup> Berger, H G, Honig, P J, and Liebman, R, *American Journal of Diseases of Children*, 1977, **131**, 1340.

## Liver fluke in Britain

However rare human liver fluke infection may be in Britain, failure to diagnose the infection may condemn the patient to unnecessary operations and years of avoidable invalidism. The truth of this is well shown by a recent account<sup>1</sup> of a patient with fascioliasis seen in Liverpool.

The victim, a 54-year-old Englishman, had been ill for six years with recurring bouts of obstructive jaundice, pain in the right upper quadrant of the abdomen, fever, vomiting, and diarrhoea. On three occasions he had been found to be severely anaemic, but no source could be found for his loss of blood into the gastrointestinal tract (shown by isotope studies). Laparotomy two years before he was seen in Liverpool had shown multiple nodules on the liver surface, but no obvious abnormality of the bile ducts, and no sign of a peptic ulcer to account for the blood loss.

On six out of seven occasions the patient's differential white cell count showed an eosinophilia of 20-32%, and this feature led to a determined effort to find *Fasciola* eggs in the stool. A sensitive concentration method revealed numerous *Fasciola hepatica* eggs, and the complement fixation test was strongly positive. At this stage retrospective history taking disclosed that the patient had a caravan in a farmer's field in the Lake District, where he stayed every spring and early summer. On several occasions he had been severely ill after visits to the site, and he admitted to eating large amounts of wild watercress growing in a stream near by. The site was grazed by cattle and sheep, and infected specimens of the snail intermediate host were found among the wild watercress. The illness after the acute infection was characterised by fever and anaemia, and the severe anaemia was probably due to haemobilia—a well-documented event in infected animals.

Once the diagnosis was made the patient was treated with a full course of bithionol. Complete clinical recovery and parasitological cure ensued, and there has been no relapse. Only one more case, the patient's wife, was discovered from a full epidemiological survey of other holidaymakers who had used the camp site. Review of the histological changes in the patient's liver removed by wedge resection at laparotomy showed changes consistent with fascioliasis, and examination of several sections brought one typical *Fasciola* egg to light.

There have been periodic outbreaks of human fascioliasis in Britain in recent years, notably in Hampshire<sup>2</sup> and Shropshire,<sup>3</sup> but clinical memory for most rarities is short. The Liverpool case shows the importance of the association of eosinophilia with obstructive jaundice and the effectiveness of drug treatment with bithionol.<sup>4</sup> It should also remind us that blood loss into the gastrointestinal tract is not always from peptic ulcer.

The case report did not mention a closely related disease that may present in Britain: infection with one of the Oriental liver flukes, *Clonorchis sinensis* or *Opisthorchis* species. These infections are acquired from eating raw freshwater fish, and, though asymptomatic infection is common, obstructive jaundice may occur and cholangiocarcinoma may complicate chronic infections. The infection is occasionally recognised in immigrants from SE Asia in Britain, and, if Canadian experience is typical,<sup>5</sup> there must be many unrecognised infections in our own Chinese communities. In Montreal no fewer than 60 of 400 Chinese immigrants examined were infected with *Clonorchis sinensis*, so that obstructive jaundice in an immigrant Chinese is an indication to search for this infection.

<sup>1</sup> Jones, E A, *et al*, *American Journal of Medicine*, 1977, **63**, 836.

<sup>2</sup> Facey, R V, and Marsden, P D, *British Medical Journal*, 1960, **2**, 619.

<sup>3</sup> Ashton, W L G, *et al*, *British Medical Journal*, 1970, **3**, 500.

<sup>4</sup> *Drugs and Therapeutics Bulletin*, 1975, **13**, 65.

<sup>5</sup> Seah, S K K, *Journal of Tropical Medicine and Hygiene*, 1973, **76**, 291.

## Partial meniscectomy preferred

When in 1883 Thomas Annandale operated on a miner with recurrent locking of the knee he sutured the loose anterior end of the medial cartilage back into position with catgut.<sup>1</sup> Though five months later his patient was relieved, the method proved unreliable and was soon replaced by meniscectomy. In 1909 Robert Jones,<sup>2</sup> reporting on over 400 operations, commented, "Stitching of the cartilage should be an obsolete operation." He confidently stated, "It is only necessary to remove the loose portion of cartilage." But 15 years later the problem of recurrent symptoms was stimulating a swing to total meniscectomy<sup>3</sup>; and surgeons emphasised that often a posterior tear might not be disclosed until the meniscus had been freed by dissection and removed. Since then routine total meniscectomy has been strongly urged,<sup>4 5</sup> advice supported by numerous photographs of operation specimens showing multiple tears, some of which might have been overlooked if the whole meniscus had not been removed. Yet many surgeons have found removal of the loose fragment alone an easier, quicker operation with an easier, quicker recovery for the patient.<sup>6 7</sup> Even in experienced hands removal of the whole meniscus must mean more extensive injury to the knee, with extra hazards to the capsule,

ligaments, and articular cartilage. Fresh evidence is now reopening this argument.

The initial advantages of partial meniscectomy over total have been confirmed repeatedly. In one prospective trial<sup>8</sup> the early morbidity was "much less." A more detailed retrospective review<sup>9</sup> found that partial meniscectomy was followed by less pain and more rapid recovery of quadriceps power, so allowing the patient to be discharged from hospital on average one day earlier. Subsequent recovery of joint function to the stage when unprotected use of the leg could be permitted was substantially quicker, with a gain of five days. These short-term advantages would be insufficient justification for partial meniscectomy if the more remote results were poor, but this is not the case. Entirely satisfactory results were reported in one series in 40 of 46 partial meniscectomies.<sup>10</sup> Another ten-year review found that 80% of patients had no serious symptoms.<sup>11</sup> A review of 78 partial and 125 total meniscectomies 10 to 30 years later gave a slight advantage in good and excellent results to the smaller operation.<sup>12</sup> The best results of all succeeded simple removal of a bucket handle fragment. Three other careful reviews have shown a clear long-term advantage to the lesser operation. In one,<sup>9</sup> all 20 patients after partial meniscectomy were enthusiastic about the result, compared with 30 of 48 who had had the whole meniscus removed. In another group<sup>13</sup> effusion was four times and loss of motion twice as common after total meniscectomy. In both these series the bigger operation was followed more frequently by late radiographic evidence of joint deterioration. In a prospective survey<sup>8</sup> of 107 total and 33 partial meniscectomies 31 of the latter had no symptoms compared with only 66 in the total meniscectomy group.

Experience has not, therefore, born out the fear that recurrent symptoms might be more frequent after partial meniscectomy. In fact, there is both clinical and radiological evidence of less late deterioration in the knee when it has been possible to restrict the operation to removal of the loose fragment only. So we can no longer justify an uncritical policy of total meniscectomy. The whole cartilage must be removed for multiple splits or for a peripheral tear, but for a bucket handle tear or a tear of the free margin the loose fragment alone should be excised. The surgeon must then make sure that he has overlooked no further lesion. Preliminary arthroscopy should help here,<sup>14-16</sup> and, if the stimulating paper by Dandy in this issue (p 1099) is any guide, arthroscopy also offers a prospect of making partial meniscectomy even swifter and neater.

<sup>1</sup> Annandale, T, *British Medical Journal*, 1885, 1, 779.

<sup>2</sup> Jones, R, *Annals of Surgery*, 1909, 50, 969.

<sup>3</sup> Fisher, A G T, *Internal Derangements of the Knee Joint*. London, Lewis, 1924.

<sup>4</sup> Smillie, I S, *Injuries of the Knee Joint*. Edinburgh, Livingstone, 1946.

<sup>5</sup> Watson-Jones, R, *Fractures and Joint Injuries*, 4th ed. London, Livingstone, 1955.

<sup>6</sup> Bonnin, J G, in *Modern Trends in Orthopaedics*, 2nd series, ed H Platt. London, Butterworth, 1956.

<sup>7</sup> Stewart, M, in *Campbell's Operative Orthopaedics*, 4th edn. St Louis, C V Mosby, 1963.

<sup>8</sup> Jackson, R W, and Dandy, D J, *Journal of Bone and Joint Surgery*, 1976, 58B, 142.

<sup>9</sup> McGinty, J B, Geuss, L F, and Marvin, R A, *Journal of Bone and Joint Surgery*, 1977, 59A, 763.

<sup>10</sup> Aarstrand, T, *Acta Chirurgica Scandinavica*, 1954, 107, 146.

<sup>11</sup> Fowler, A W, *Journal of Bone and Joint Surgery*, 1976, 58B, 136.

<sup>12</sup> Tapper, E M, and Hoover, N W, *Journal of Bone and Joint Surgery*, 1969, 51A, 517.

<sup>13</sup> Cargill, A O'R, and Jackson, J P, *Journal of Bone and Joint Surgery*, 1976, 58A, 248.

<sup>14</sup> Hirschowitz, D, *Journal of Bone and Joint Surgery*, 1976, 58B, 367.

<sup>15</sup> Dandy, D J, and Jackson, R W, *Journal of Bone and Joint Surgery*, 1975, 57B, 346.

<sup>16</sup> DeHaven, K E, and Collins, H R, *Journal of Bone and Joint Surgery*, 1975, 57A, 802.

## Diuretics in the elderly

Elderly patients receive a disproportionate number of drugs on prescription, and diuretics are one of the most common classes of drug given to them.<sup>1-5</sup> The object of diuretic treatment is usually the relief of symptoms of hypertension or heart failure, but diagnosis of these conditions may be made from slender evidence so that the use of diuretics is often inappropriate and potentially harmful. Ankle oedema is a misleading sign: only occasionally is it associated with heart failure, and most often it is due to muscular inactivity combined with incompetent leg veins.<sup>6</sup> In a recent study from Cardiff diuretics were stopped in 54 long-stay patients: only eight needed to go back on them.<sup>7</sup> The treatment of hypertension in the elderly is also controversial, and whether it produces a worthwhile extension of useful life is not clear. Amery *et al*<sup>8</sup> have shown recently that diuretics (with or without methyldopa) can lower elderly patients' blood pressure without major clinical or biochemical disturbances. Catastrophic hypotension, however, may occur with over-enthusiastic treatment,<sup>9</sup> and hypotensive drugs should probably not be given unless a patient has a blood pressure of more than 200/110 mm Hg lying down with no postural fall on three or more occasions.<sup>10</sup>

The unwanted effects of diuretics in the elderly stem from their known pharmacological actions; they differ from those in younger adults only in their incidence and severity. For example, a brisk diuresis—particularly from potent "loop" diuretics such as frusemide and bumetanide—often leads to urinary incontinence, acute retention, or interference with social activities such as shopping and travelling. Thiazide diuretics may also cause these problems, but with their smooth and less potent action they are preferred by many patients—and considerably cheaper.

All diuretics except amiloride, spironolactone, and triamterene increase potassium loss, at least initially.<sup>11</sup> Though the importance of hypokalaemia remains debatable potassium loss is likely to be more serious in elderly patients, since many are also taking digoxin and have diets low in potassium.<sup>12</sup> Hypokalaemia should be suspected in patients on diuretics who have muscle weakness, tiredness, depression, or confusion. More serious effects of hypokalaemia, such as paralytic ileus, renal tubular damage, and cardiac arrhythmias, are unusual unless there is another cause of potassium loss such as vomiting, fistulas, or diarrhoea. Potassium supplements are often recommended for older patients, but many find the effervescent formulations unpalatable and have difficulty in swallowing Slow-K—which sometimes, moreover, causes ulceration of the small intestine with haemorrhage, perforation, or stenosis.<sup>13</sup> Thus the supplements that are prescribed are frequently not taken.<sup>14</sup> The alternative is to use a combination of a potassium-conserving diuretic with either a thiazide or a loop type. This will result in a more effective diuresis, but the combination may lead to hyperkalaemia if the patient has diminished renal function (creatinine clearance less than 10 ml per minute) or is also taking potassium supplements.

Diuretic treatment may also precipitate overt diabetes mellitus.<sup>11</sup> The risk rises as age<sup>15</sup> and weight increase or if the patient has already shown evidence of latent diabetes. Fortunately, the condition can be detected promptly if there is regular urine analysis and can usually be controlled by diet or a sulphonylurea drug (but not chlorpropamide). The remaining side effect is uric acid retention, which leads only rarely to secondary gout.<sup>11</sup> Allopurinol should be used only if raised serum uric acid concentrations are associated with more than one attack of acute gout.