however, supported the probable effectiveness of passive movement but stated that further research was required to determine therapeutic indications.⁹ The direction for future research into conservative management of back trouble was discussed at an international back pain congress in 1985. The consensus of opinion suggested that efforts should be made to define clinically identifiable syndromes with a known clinical course, which would increase the validity of controlled therapeutic trials ("Back pain: current concepts and recent advances," November 1985, Vienna). Osteopathy should be able to contribute to this process by subjecting its specialised clinical diagnostic procedures to scientific scrutiny to establish their discriminatory value.

At present it is probably correct to describe osteopaths primarily as therapists.¹⁰ Nevertheless, many would claim to be musculoskeletal specialists capable of offering a complete diagnostic and assessment service in addition to the treatment, but there is little evidence to confirm this view. The future place of osteopathy will be determined through scientific research procedures, but these will probably have to be directed to establishing not simply its value as a

treatment but also its potential as a specialty. Meanwhile, it will probably remain one of the frequently used treatments for back trouble which is no worse—if no better—than other conservative approaches and may be of benefit in some patients.

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Lesson of the Week

Chronic urological problems in neurological patients

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Urological problems are common in neurological disorders, particularly in those that become chronic—for example, stroke and multiple sclerosis. Patients with stroke whose consciousness is altered are incontinent, and some may need long term catheterisation during rehabilitation. In such patients the maximum urinary disability usually occurs at the beginning of the illness.

The most common associated problems in nearly all patients with established multiple sclerosis—that is, those with clinical neurological deficit—are failure to empty the bladder, leading to retention of urine, and failure to store urine, leading to incontinence. Unlike in patients with stroke, urinary problems in patients with multiple sclerosis tend to deteriorate rather than improve over time.

We describe two patients whose urological complaints were wrongly attributed to their neurological problem.

Case 1

A 74 year old woman was admitted for investigation of urinary problems. Multiple sclerosis had been diagnosed in 1958. She had had further admissions to hospital because of multiple sclerosis, and her condition had gradually deteriorated. In May 1984 she was admitted to hospital with a stroke in the right cerebral hemisphere. She recovered well within a month and was discharged to a warden controlled flat, where she lived an

Urinary problems are common in chronic neurological disorders, but knowledge of the clinical course of the disease should help in selecting those patients who need further investigations

independent life with some help from her daughter—for example, with shopping and bathing.

She had had no urinary problems apart from the occasional urinary tract infection, which was treated by her general practitioner, but she noticed increasing frequency of micturition over time though paid no attention to it. On admission in May 1984 her frequency of micturition became worse, and she was incontinent of urine. This was treated with brief catheterisation and frequent visits to the toilet. Her urinary problems worsened after discharge, and she again became incontinent of urine, with associated pelvic discomfort and pain. Because of her neurological disability from multiple sclerosis she was unable to walk to the toilet quickly enough to avoid incontinence. When seen as a new referral to the neurology clinic in August 1985, she was incontinent at night and had to empty her bladder more than 20 times during the day to stay dry. Before this her worsening urological symptoms had been put down to her longstanding multiple sclerosis.

The results of physical examination showed a spastic gait and cerebellar incoordination of her arms. There was sustained nystagmus on lateral gaze bilaterally but no residual neurological signs from her stroke. The results of the rest of the examination were normal. A midstream sample of urine showed evidence of urinary tract infection. Plain x ray film of the abdomen, an intravenous urogram, and the results of cystoscopic examination showed a large bladder calculus formed around a catheter tip (fig 1). Four diverticuli in the bladder wall indicated outlet obstruction. The stone was crushed and removed cystoscopically. Postoperatively, her urinary symptoms improved considerably. Unfortunately, she died suddenly from a myocardial infarction just before being discharged home three weeks later.

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FIG 1—Plain x ray film showing laminated calculus (case 1).

FIG 2—Plain x ray film showing multiple calculi (case 2).

Case 2

A 30 year old man was admitted for investigation of recurrent urinary problems. In 1981 he had suffered a brain stem stroke from a presumed vascular malformation and was unconscious for one month. He remained in hospital for 10 months. His recovery was slow, but by September 1982 he was able to walk unaided. He also had a period of rehabilitation at Passmore Edwards Rehabilitation Unit and was discharged from there an independent man, but with slight neurological deficit affecting the left side of his body. His left arm recovered completely, and he was able to drive a car with a manual gearbox.

During the whole of his stay in hospital he had an indwelling urinary catheter and suffered recurrent urinary tract infections, which were treated with antibiotics and chlorhexadine bladder washouts. After his discharge he continued to have urinary tract infections, which were treated by his general practitioner. In addition, he complained of intermittent haematuria, sometimes associated with urethral pain, but no investigations were ordered. His symptoms were assumed to be a residual legacy of his stroke.

He was eventually referred to hospital for further investigations in May 1984, but, while awaiting investigation, he presented to the accident and emergency department with gross haematuria associated with pain at the tip of his penis towards the end of micturition. He was admitted for further investigations, and plain x ray film of the abdomen, an intravenous urogram, and cystoscopy showed several calculi in the bladder (fig 2) that were later crushed and washed out per urethra. Postoperatively, his urinary symptoms completely resolved. Eighteen months later he remained free of symptoms.

Discussion

Traditional teaching encourages doctors to attribute all symptoms to one disease whenever possible, an idea that is practised faithfully when common symptoms occur in common diseases, particularly

when the disease in question has a chronic and protracted cause. Urinary symptoms, incontinence in particular, are common in the acute stage of stroke. When the patient's consciousness improves and he is mobile incontinence is no longer a problem. A recent study has shown that the degree of incontinence is more accurate than the degree of consciousness in predicting prognosis and patients in whom incontinence is not a problem seem to do well after a stroke.¹ Urinary problems starting weeks or months after a stroke should not be put down to the original stroke, particularly when new symptoms occur one or more years after the stroke—for example, as in case 2.

Multiple sclerosis is a chronic neurological disorder commonly associated with urinary problems. Types of bladder dysfunction that may occur in multiple sclerosis are sensory paralytic bladder, motor paralytic bladder, autonomous neuropathic bladder, uninhibited neuropathic bladder, and reflex neuropathic bladder. Suprapubic pain or discomfort are not problems in multiple sclerosis unless there are other complications such as infection and bladder stones. Important factors in the formation of urinary stones are increased concentration of solutes owing to excessive excretion or concentration of urine, as in dehydration, and the presence of a nidus such as a foreign body or bacterial infection. These factors are present in patients with chronic neurological problems because of recurrent urinary tract infections, frequent catheterisations, and dehydration, especially in those who do have urinary frequency and incontinence and in whom intake of oral fluids is voluntarily restricted to minimise urinary incontinence.

Both patients in this report were candidates for urinary stones but were not referred early enough for investigations because their urinary problems were attributed to a previous neurological problem. In both cases there were reasons for a high index of suspicion, but these were overridden by the familiarity of urinary symptoms associated with chronic neurological disorders, and thus referral for investigations was delayed.

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Are ear drops containing antibacterial agents advised in the treatment of chronic suppurating otitis media?

About 5% of the population have chronic otitis media¹ and approximately 2% will have associated mucopurulent discharge. Active chronic otitis media is therefore a common problem. Medical treatment may be any combination of aural toilet, local insufflation of antibiotic powders, systemic antibiotics, topical antibiotic ear drops, and topical antibiotic ear drops with steroid. Except for antibiotic ear drops, all the other forms of management after four weeks of treatment give a resolution rate of only 30%, which is little better than the spontaneous resolution rate.² With a combination of antibiotic and steroid ear drops used for six weeks and a compliance rate of greater than 70%, 50% of wet ears will resolve (GG Browning *et al*, unpublished observations). This is significantly better than the spontaneous resolution rate.² Patient history is a poor indicator of ear activity and does not correlate with otoscopic appearance (GG Browning *et al*). Therefore the only form of local treatment that seems to work is antibiotic and steroid ear drops. The relapse rate is high, however, and symptomatic patients report as much improvement with dry mopping alone. An alternative to medical management is surgery, and in correct hands 80% of ears will remain inactive in the long term and in many this will be associated with an improvement in hearing.³—W V CARLIN, senior registrar in otolaryngology, Cardiff.

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