psoriasis is a common condition. On a full double-decker bus, at least two people will actually have psoriasis and another five a predisposition to it.

(6) Finally, it is important that they understand how to deal with any prescription given.

The Psoriasis Association

The Psoriasis Association was founded in 1968 and has become an important self-help organisation, providing support and mutual help for sufferers. It is also the main source of informa-

Lesson of the Week

tion on all aspects of the condition. More research projects into the causes, treatment, and cure of psoriasis are being supported each year with larger grants; community acceptance and understanding have already been increased by publicity and education. The association works continually to improve standards of patient care and has established strong national and international links to achieve this.

Membership is open to anyone, and every member receives the informative national journal "Beyond the Ointment" three times a year. Members may also participate voluntarily in the activities of local groups, which provide social contact and information and raise funds for research and education.

Prognosis for sphincter recovery after operation for cauda equina compression owing to lumbar disc prolapse

S A O'LAOIRE, H A CROCKARD, D G THOMAS

In the 45 years since the neurological complications of ruptured lumbar intervertebral discs became generally recognised¹ it has been known that compression of the cauda equina could result in paralysis of bowel and bladder function.¹ Indeed, such compression has been considered the only absolute indication for operation in cases of lumbar disc disease.² Few reports of cauda equina compression owing to lumbar disc prolapse have been published, and the prognosis for the recovery of bowel and bladder function after surgery has been uniformly gloomy,³⁻⁵ though the recovery of motor function has generally been considered likely.

Sphincter paralysis is a rare $(2\%)^2$ ⁶ but potentially disastrous complication of lumbar intervertebral disc prolapse. Patients usually present first in general practice and then in general medical, surgical, or orthopaedic or rheumatology departments. It is therefore extremely important that doctors are aware of the condition so that a neurosurgeon is consulted before the neurological damage becomes permanent. The urgency of the diagnosis and treatment may be compared to that for extradural haematoma in head injury.

Twenty years ago Shepherd⁴ reviewed the cases that presented to the National Hospital, Maida Vale and suggested that early diagnosis and surgery were important for reducing permanent neurological damage. We therefore reviewed all operated cases of central lumbar disc prolapse at the National Hospitals for Nervous Diseases at Queen Square and Maida Vale since 1960, and those presenting at University College Hospital, to see

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Early recognition of cauda equina compression caused by lumbar disc prolapse can prevent irreversible sphincter paralysis

whether there has been an improvement in prognosis. We concentrated on patients with impaired sphincter function, and use the term "sphincter" loosely, as in previous reports, to include all mechanisms required for normal micturition and defecation.

Clinical findings

We studied 17 men and 12 women, whose ages ranged from 23 to 69 years. All but five had a past history of lumbar disc disease: 11 had had episodes of back pain; 11 had had sciatica and back pain and two of these had had operations for prolapsed lumbar disc at the same level. Seven patients had had an acute onset associated with trauma. All 29 patients presented with back pain, and all but five had sciatica, bilateral in 18 and unilateral in six (fig 1). Of the five patients without sciatica, two had a history of pain shooting into the genitalia and rectum, and the other three had had similar pain at the onset of sphincter disturbance.

Impaired sphincter function (fig 2) had occurred from as little as 24 hours to as long as one year before operation. Complete loss of sphincter control—meaning that catheterisation was required to treat urinary retention (providing objective evidence of a severe lesion) occurred in 13 patients. In all but one of these patients the retention was painless. The other 16 patients were able to micturate by bladder compression, either by breath-holding or by manually compressing the abdomen, and these were classified as having a partial sphincter loss. Twenty patients had weakness in the legs (fig 3), varying from weak dorsiflexion and eversion of one foot to bilateral weakness severe enough to prevent walking (3 cases). The other nine patients reported no weakness.



FIG 1—How leg pain affected the outcome of the operation. FIG 2—How preoperative sphincter loss affected the outcome of the operation. FIG 3— How motor weakness affected the outcome of the operation.

A few patients had peripheral sensory loss in one foot. All but two, however, had a sensory loss in the perineum (fig 4). Fifteen patients had sensory loss in the skin of the buttocks and upper posterior thighs ("saddle area"), but in 12 patients it was confined to the perineum—that is, the depths of the natal cleft (pericoccygeal, perianal, and posterior labial or scrotal areas). Perineal sensory impairment was total (anaesthetic) in four patients, dense (analgesic) in 12, and moderate (hypoalgesic and hypaesthetic, but with discrimination preserved) in 11. Two patients had no sensory deficit, one of whom had painful urinary retention.



FIG 4—How the severity and extent of motor loss affected the outcome of the operation.

Myelography in all cases showed a complete block at the appropriate site. In 14 patients the lesion was at the L4/5 interspace, 12 had a lumbosacral disc prolapse, and three were obstructed at L3/4 interspace. All patients had a laminectomy, when the extruded disc fragment was excised and the disc space cleared. Three of the 16 patients who could still empty their bladders before operation needed catheterisation for a while after operation. Only five of the 13 patients who had presented with urinary retention required permanent catheterisation.

Results

Eighteen patients regained full control of micturition and defecation. In six others sphincter recovery was incomplete. They were able to micturate by compressing the bladder either manually or by straining; all were occasionally incontinent of urine to some degree, as when running or laughing. Their main handicap, however, was faecal incontinence, which they all suffered from to some extent. None could control flatus, and all were occasionally incontinent of faeces, though this could be minimised by regular daily bowel opening, routine use of laxatives, and occasional manual evacuation. Five patients did not recover sphincter control and were classified as poor results.

All six patients with a fair result still had some perineal sensory impairment one year after operation, as did five of the 18 patients who made a full recovery of micturition and defecation functions. All the men who had a good or fair recovery reported successful erection and ejaculation, but those with residual perineal numbness (which included all with fair results and three with good results) said that intercourse was not normal.

The major factors that influenced the outcome of the operation were the severity of the preoperative sphincter disturbance (fig 2) and the extent of sensory loss—and the severity of that loss within the natal cleft (fig 4). Leg pain as a presenting symptom was important (fig 1), and sciatica in both legs carried a poorer result than in one leg. A complete lack of leg pain carried a particularly poor prognosis, and it is notable that the diagnosis was greatly delayed in such cases. There was no correlation between the outcome of operation and the presence or absence of motor weakness (fig 3).

Discussion

Published series³⁻⁵ of cauda equina compression owing to massive disc prolapse have suggested that the outcome for the control of bowel and bladder function is poor. Our experience suggests that the prognosis is more favourable. In a high proportion of the patients in our series some sphincter control and sensory function were preserved at the time of operation. We think that this factor accounts for the improvement of previous reports.

We think that it is crucial for doctors who care for patients with lumbar disc disease to realise that paralysis of the sphincter

Duration of time from first symptom to operation and from first urinary symptom to operation, and results of operation

Case No	Age (years)	Sex	Time to operation		
			From first symptom	From first urinary symptom	– Postoperative result
1	42	F	4 days	4 days	Fair
2	26	м	7 days	4 days	Fair
3	69	F	2 mnth	5 days	Poor
4	26	м	7 days	2 days	Poor
5	41	м	2 mnth	3 wk	Poor
6	36	F	5 wk	5 wk	Fair
7	30	F	4 mnth	3 wk	Normal
8	33	м	12 mnth	12 mnth	Normal
9	55	м	11 days	10 days	Poor
10	42	F	3 days	1 day	Normal
11	28	м	4 mnth	4 mnth	Normal
12	46	м	8 days	7 days	Normal
13	53	м	14 days	1 day	Normal
14	25	м	24 mnth	2 mnth	Normal
15	64	м	8 days	4 days	Fair
16	35	F	4 mnth	4 mnth	Normal
17	43	м	5 wk	7 days	Normal
18	28	F	14 days	11 days	Normal
19	42	м	18 mnth	1 mnth	Fair
20	67	F	3 mnth	6 wk	Fair
21	31	м	3 wk	17 days	Normal
22	31	F	4 days	4 days	Normal
23	56	м	3 mnth	3 mnth	Normal
24	40	м	3 mnth	3 mnth	Normal
25	23	F	5 mnth	5 davs	Normal
26	26	F	3 mnth	3 mnth	Normal
27	47	м	3 wk	10 days	Normal
28	41	м	7 days	4 days	Poor
29	50	F	24 mnth	2 mnth	Normal

is possible. It is commonly believed that bilateral sciatica and a past history of lumbar disc disease are precursors of sphincter paralysis. We stress that the leg pain may be unilateral—or even non-existent. If it is non-existent there will be rectal or vaginal pain, which may not be prominent when the patient presents. Furthermore, many of our cases presented during the first attack of lumbar disc disease.

Urinary retention associated with centrally protruded discs is generally painless, and the abdomen should be examined for an enlarged bladder in suspected cases. Neurological examination should include a careful search for sensory abnormality in the perineum between the buttocks. It has been suggested⁴ that the patients who fail to recover sphincter function after operation may suffer from intractable urinary infection and renal damage, but our experience and that of others⁶ does not bear that out. Most patients can empty their bladders voluntarily, though some may require bladder neck resection.⁷ Faecal continence is also possible with regular suppositories, thus allowing patients to have a normal social life, the one embarrassment being the complete inability to control flatus.

Despite the lack of correlation between the length of the history (table) and result of operation, we believe that an emergency operation is mandatory. Although partial loss of control of the sphincter may persist for as long as one year, in some cases there was a complete lesion within 24 hours. Delay surely allows a partial cauda equina lesion to progress to complete sphincter and sensory paralysis. A neurologist should be consulted urgently to provide the best possible prognosis.

For Debate . . .

We believe that previous reports, though gloomy in outlook, have drawn attention to this condition, leading to earlier diagnosis in many instances, and this seems to be borne out in our own unit since Shepherd's⁴ paper.

We thank Mr B A Harries, Professor V Logue, and Professor L Symon for permission to include patients under their care.

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Medical manpower and the career structure: a new approach

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Abstract

A change in the ratio of trainees to consultants is necessary: despite being the agreed policy of the profession and DHSS, existing central planning machinery has failed to bring about its implementation. There is no reason to suppose that central methods can ever achieve the desired ends without intolerable constraints on the liberty of doctors. Freedom for individual groups of consultants to negotiate local changes in manpower coupled with inducements to both them and the authorities would seem to provide a promising approach that has not yet been adequately debated or explored. In the nature of it such an idea is unlikely to be attractive to central bureaucratic organisations, whether governmental or professional.

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Introduction

Everyone now accepts that there is a serious imbalance between the number of doctors in the training grades and in the career grades. While partly manageable when the junior ranks contained a large proportion of immigrant doctors able to reemigrate, the rise in the number of British trained graduates is rapidly bringing matters to crisis point.

There is also little disagreement that there are only two possible solutions. A semi-permanent career grade other than consultant (sub-consultant grade): this has repeatedly been ruled out and seems unlikely to be ever acceptable. The alternative, a considerable expansion of the consultant grade, with some contraction of registrar numbers, has been the agreed policy of both DHSS and the profession for a decade, and is enshrined in the "Third progress report."¹

It is commonly asserted that this policy has failed. This is not so: it has merely failed to be implemented. To quote the Medical Practitioners Union (MPU) on this point, "... the problem has been ... the failure of those who are responsible for central planning to persuade those who possess power locally to pursue the central policy, and the lack of any mechanism to constrain them to do so. Our present problem has been created not by central and regional manpower committees but by the failure of medical executive committees at district and area level to follow

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