AN EPIDEMIC OF LUMBAGO

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Descriptions of lumbago are to be found in works on orthopaedics, rheumatology, and general medicine, though in these fields specialists see only a relatively small number of cases, since general practitioners do not often need help in the management of these patients. It is then, the family doctor who more adequately can describe the natural history of the illness.

Medical literature contains an unexpected paucity of detail in the description of lumbago, the signs, symptoms, and progress often being summarized in two or three sentences. This paper will, in a small way, fill in one or two of the gaps and omissions.

Case 1. On 20 March 1958 Charles B., when walking downstairs in the best of health felt a sudden stab of the most severe pain in the left lumbar region which halted him in his step. Simultaneously, he felt another pain in the left thigh of similar severity, but on careful questioning I found that the two occurred as distinct pains and that there was no radiation from one to the other. He had to be carried away on a stretcher because he could not move.

When I saw him at home he lay in bed on his right side in a rigid posture, and though he would not choose to make even the slightest movement, by coaxing and re-assuring him, I was able to elicit full movements in both hip and both knee joints. Straight leg raising was full and equal on both sides but movements of the lumbar spine were resisted with an unyielding stiffness. The whole of the lumbo-sacral region of the back was tender to palpation but in one sharply-defined area above the left iliac crest near the lateral border of sacro-spinalis, digital pressure produced the most exquisite pain. There were no other abnormal signs—pulse and temperature were normal and there were no constitutional signs of shock, his general condition being very good indeed.

The pain was unaffected by simple analgesics and he lay quite motionless in bed for 8 days. In the second week he was able to move, at first in bed and later in the room, his lumbar spine remaining persistently rigid and the point of maximum tenderness easily definable, pressure on which produced the pain in its original character and intensity.

In the third week, he was able to hobble around for most of the day with a stick, the pain having faded into a continuous ache, and with the passage of time, pressure over the tender spot was increasingly less objectionable. He was able to resume his normal sedentary activities 5 weeks after the onset of the illness.

Charles B. was 51, fairly broad of build, with grey hair, blue eyes, and a fair complexion.

Case 2. On 1 April 1958 Ellen R. was standing by a table preparing food and

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was struck by an unheralded pain of the severest degree in the right lumbar region—" as if someone had snapped my back in two ". Involuntarily she screamed out in pain and fell to the floor where she lay immobile for half-an-hour. Being alone in the house, she dragged herself along the floor and attracted the attention of a neighbour. When I saw her, she was motionless in bed but could be coaxed through a full range of hip and knee joint movements. I found a point of maximum tenderness in the right lumbar region at the outer border of sacro-spinalis near the iliac crest. Pulse and temperature were normal and there were no constitutional signs. Her pain was relieved only by pethidine.

The severe pain lasted for a week and as it began to wane she suffered a relapse. Again unexpectedly, she was struck with a pain, this time in the right knee, which was so severe that she vomited, but there were no other concomitant symptoms and no physical signs in or around the joint except for tiny patches of moderate degrees of tenderness over bony and ligamentous areas.

The same symptom-complex occurred a third time. As the pain (from the knee) began to wane she was struck again in the right thigh, but this episode was less severe.

By the third week she was mobile and made a slow uninterrupted recovery.

Ellen R. was in her fifties, had masculine features, was of fairly broad build with blue eyes, a fair complexion, and brunette hair.

Case 3. Thomas C. was a policeman. On the evening of 10 April 1958 when on point duty, he had a rigor which passed off without apparent sequel and he remained well for two days. On the third day, while standing by the kitchen sink, he had just started the movement of turning when he was struck with a very severe pain in the lumbar region and he " collapsed like a log of wood on the floor ". There he remained transfixed and even the slightest movement produced an exacerbation of his pain which already seemed to be at a maximum. So extreme was this pain, that after dragging himself to a chair, he remained in it for several days and nights not daring to move. Even so, I was able to elicit full movements of the knee and hip joints but not of the lumbar spine. I found a point of maximum tenderness over the sacrum in the mid-line. Constitutional signs were absent and pulse and temperature were normal.

The very severe pain lasted for 10 days and faded gradually over the next 2–3 weeks.

An interesting point is that this patient suffered from sciatica on the left side which caused constant suffering, but it was totally eclipsed by the lumbago. On direct questioning he said that the pains from the lumbago and sciatica were quite different both in character and intensity.

Case 4. Harry T. had a cerebral thrombosis in 1954. On 7 April 1958 he developed an aching across the lower part of his back, constant in intensity but interrupted by acute exacerbations of " violent spasms of pain " which lasted ½–¾ hour. He was unable to move during the spasms but felt more comfortable between times hobbling about the room. In my examination I elicited full movements of the back, hips and knees and found an area of great tenderness over the sacro-spinalis near the iliac crest in similar positions on both sides of the spine. The spasms of pain were very severe and kept him awake at night, but unfortunately I was unable to examine him during one of these exacerbations and cannot record if movements of the lumbar spine were possible at these times. Again there were no constitutional signs.

Tablets of dormoran helped his pain a little and the spasms began to ease after several days and disappeared after 3 weeks.

The patient was in his early sixties, broad of build with grey hair, blue eyes and a fair complexion.

Case 5. George W. (Unhappily my bedside notes on this patient are missing, and I will record only those facts of which I am sure.) This patient had been in good health for years when, on 22 March 1958, he felt an aching across the

lower part of his back, which, within ½ hour, increased to such a severity that it disabled him totally. He remained in bed motionless for 14 days. When the pain began to wane he was struck a second time with a severe stab in the lumbar region. This rendered him helpless again but not for as long as previously.

George W. was 56, slightly slimmer than Charles B., had grey hair, blue eyes and a fair complexion.

Case 6. Mary F., had been well until 27 April 1958, when she developed a severe pain in the lumbar region which rose to a crescendo within half an hour. She was unable to stand but was confined to bed for 24 hours only, during which time I did not have the opportunity of examining her. As the lumbar pain eased, it " moved down the thigh " but this could not be described as a recurrence.

Mary F. was 53, broad of build with facial hirsutes. She had grey hair, blue eyes and a fair complexion.

Discussion

I had not seen a patient with lumbago for several months and these six cases occurred within a few weeks of each other. I thought that there might be an infective origin and I queried some of my local colleagues about their patients. Most had seen many similar cases at that time. One remarked on the abundance of generalized rheumatic pains which were of greater intensity than he usually encountered, while another agreed that he had seen more cases of lumbago as such. A nearby colleague volunteered the information that he had seen many patients with severe and very acute back pains occurring in late middle-aged males, and in these cases his diagnosis was " acute lumbar fibrositis ". Yet another colleague 5 miles away, and a keen observer, could not recall having seen a single, similar case.

I have been unable to describe the symptoms and signs of these patients in greater detail as I had not expected an " outbreak " of lumbago, and I rely solely on my brief bedside notes. But nevertheless, I am able to extract some interesting information.

a. A description by illustrative cases of the natural history of lumbago.
b. A record (as far as I can tell for the first time) of the occurrence of relapses in lumbago.
c. A description of lumbago as occurring in epidemic form, which I have been unable to find mentioned in published works.
d. A description of some physical characteristics common to all six patients I attended.

The Natural History of Lumbago

Pain

One symptom common to all patients was the occurrence of pain of the severest degree, which, at its height, caused complete immobility. Charles B. was carried away in fixed position on a

stretcher, and Thomas C. would not move even as far as bed. Likewise Ellen R. remained alone and motionless on the floor for half an hour before dragging herself across the room, and on one occasion the intensity of her pain was so great that it caused her to vomit. This extreme of agony was usually the sole complaint. Indeed, the absence of concomitant symptoms such as shock, fever, sweating, or lassitude seems important. Prior to the onset of the illness, all the patients had enjoyed excellent health for several weeks or months with the exception of Thomas C. who had felt feverish a few days previously. The pain at its maximum was described as " stabbing " or, in two cases, as " violent spasms " and in one other as if the back had been snapped in two.

The pain was rapid in onset. In three of the six patients the pain was unheralded, markedly acute and at its maximum from the start. Thus Charles B. was caught with one foot on one stair and one foot on another, and Thomas C. and Ellen R. dropped to the floor as if felled. Two patients developed a lumbar aching which increased gradually in intensity, and within the same period of time in both cases, namely 30 minutes, reached its maximum where it remained unaltered for many days before beginning a gradual decline. One patient only, Harry T., had a constant ache in the lumbar region and suffered acute exacerbations during which he was rendered immobile several times a day.

Thus the three variations of pain which I observed were:

1. Initial pain maintained at its maximum for many days, then waning;
2. Initial aching rising to maximum pain in half an hour, then following the same course as 1. above;
3. Constant lumbar aching with acute exacerbations lasting one half to three quarters of an hour in which the maximum was reached rapidly and declined rapidly.

The points of maximum tenderness were always to be found in the lumbo-sacral region. The outer border of the sacro-spinalis was the most common site—on the left side for Charles B., on the right for Ellen R., and on both sides simultaneously for Harry T. Mary F.'s pain was anatomically just medial to that of Charles B. and Thomas C. had pain in the mid-line over the bony sacrum. Ellen R.'s pain occurred on the right side and both her relapses in knee and thigh, were also on the right side. Charles B. suffered in the back and in the thigh, both on the left side. I do not attach any significance to this similarity, I merely wish to record it.

In no case was there any radiation of pain. Charles B. was struck simultaneously in two places, but they were separate pains.

The points of most exquisite tenderness and greatest agony coincided in any one patient at a definable anatomical site, and

only in the case of Mary F. whose pain " moved down the thigh " could extension of the original pain be said to have occurred, and even so, since the spread lasted over several days, it did not come under the heading of " radiation " in the common usage of the word in medical literature.

Despite a stubborn reluctance to execute any movement at all—even talking sometimes—nevertheless, after gentle coaxing and persuading, all patients found they were able to put their hip and knee joints through their full ranges of movement in all directions. This they managed to do not only with pain at a constant maximum, but without causing moments of extra grief. Movements of the lumbar spine however were impossible, actively or passively.

Length of illness. The pain was the illness. There were no other symptoms except those consequent upon the pain, such as immobility. The affection thus defines its own three stages, acute, waning, and convalescent.

The acute stage of immobility, usually constant but sometimes intermittent, the length of which was variable—

Case 1 .. 8 days constantly
Case 2 .. 8 days constantly (not embracing relapse)
Case 3 .. 10 days constantly
Case 4 .. 21 days intermittently
Case 5 .. 14 days constantly (not embracing relapse)
Case 6 .. 1 day

The waning period was that in which the pain, in subsiding, permitted the patient movement at first in bed and later about the room. This merged into the period of convalescence in which activity was possible but the constant aching across the back, and the memory of severe pain still in mind, made the patient wary of initiating a recurrence, and he consciously restricted his activities.

Rough estimates for the length of these periods were 1–2 weeks for the waning phase and 3–6 weeks for convalescence.

The Occurrence of Relapses

I have been unable to find any mention in the literature of relapses in lumbago; from Sir William Gowers' notable article in the *British Medical Journal* of 1904 in which he used the term " fibrositis " for the first time to Tegner's contribution in the most recent edition of the *British Encyclopaedia of Medical Practice* there is no such mention. Mercer (1950) describes recurrences of acute attacks of lumbago at intervals which may merge to produce a chronic illness, but there is no reference to a relapse. In an article by Beeson and Scott (1942) an interesting reference is made to relapses in myalgia, but in their epidemic, the pain was limited

to the neck and shoulder.

Among my patients the recrudescence of case 5 was like another attack starting all over again, the pain recurring in the lumbar region. This was a true relapse. In case 2, the patient was struck, in her first recidivation, in the knee, and, in her second, in the thigh, and these may thus not merit the title of true relapses of lumbago as they did not re-occur in the lumbar region. Even so, the general symptom-complex starting with acute pain was the same.

Both these patients' relapses occurred at the same period in the natural history of the illness, that is, as the severe pain began to wane.

Physical Characteristics

The ages of my six patients ranged from 51 to 63 years. All were broad of build, though not obese. Four were men and two were women with rather masculine features. The complexion of all was fair and their eyes blue, and all except one had grey hair.

I do not draw any inference from this remarkable similarity, but it may be that lumbago occurs most often in people with these physical characteristics. The existence of such a relationship between build and a proneness to a particular ailment, though new in relation to lumbago, is already acknowledged in other affections such as duodenal ulceration and coronary thrombosis.

The details I have recorded may be specific to this outbreak, but the absence of other descriptions in the literature precludes any comparison. Sir William Gowers (1904) states that lumbago is an affliction of the second half of life, and most authors agree with him. Allbutt and Rolleston (1905) quote middle-aged people as being most affected, and Conybeare and Mann (1957) and Copeman (1935) stress the preponderance of male sufferers. In the experience of Wiles (1955) young people and those in early middle-age are most commonly affected.

X-Ray findings

After their convalescence, all six patients agreed to have x rays of their lumbar spines, but regrettably, two failed to keep their appointments. The reports are as follows:

Case 1. Defaulted.
Case 2. " O.A. lipping lower lumbar spine. No disc lesion seen."
Case 3. " Narrowing of the disc space L3/4 in particular on the right side and slight scoliosis to the left."
Case 4. " Marked arthritic changes lower lumbar spine with considerable anterior lipping of the bodies. The 5th space narrows posteriorly without lipping."
Case 5. Defaulted.
Case 6. " Slight lumbar scoliosis with no other changes."

It is interesting that none had a normal spine, and it would be reasonable to ascribe the symptom of pain to the changes shown by x ray particularly when lipping is present. But the fact that lipping is permanent and that the pain as described occurred only once, when taken in conjunction with the epidemiology, tends to disfavour an osseous aetiology. The existence of bony changes may be fortuitous, and the chances of finding such radiological signs in a random section of the community in later middle-age are not only high, but likely to be at a peak in those possessing the physical builds I have described. It is likely that the narrowing of the disc space in case 3 was connected with his sciatica.

Epidemiology

The literature contains remarkably few references to epidemic forms of myalgia in general and of lumbago in particular. Copeman (1955) mentions epidemic forms of fibrositis which, he suggests, are probably " not uncommon, but pass unrecognized as such owing to the congestion of modern town life ". Beeson and Scott (1942) in relation to myalgia of the neck and shoulders, write, " . . . in the epidemics recorded here it is of interest that the medical officers in charge were unaware of the large number of cases in the communities under their care. It is possible that epidemics frequently occur, but are seldom recognized ".

Sylvest (1934) and Pickles (1933) described epidemic intercostal myalgia (Bornholm disease) in which the pain is accompanied by pyrexia and general signs, but the epidemics of Beeson and Scott were without constitutional effects. Rolleston likened Bornholm disease to lumbago, the main difference being the anatomical site of the pain.

Crowe (1949) suggests that rheumatic pains have an infective origin, and Copeman (1935) describes lumbago as having a seasonal incidence. Copeman and Ackerman (1944) postulate fatty herniations as an aetiology in lumbago and Gordon (1936) suggests a metabolic theory.

Conclusion

This paper is a description of the natural history of lumbago and sheds some light on three aspects of the illness hitherto undescribed —that the affection may occur in epidemic form, be characterized by relapses, and that persons with a particular physical build may be more prone to affection than others.

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The Human Management of Heart Disease. W. N. LEAK, M.D. *The Chest and Heart Bulletin* (June 1961), **24**, 83.

Dr Leak makes a special plea for consideration of the patient's symptoms and feelings when he suffers from heart disease. Neurosis can easily arise, and can mimic all the common symptoms; nevertheless, these symptoms cannot be ignored. The doctor's attitude is of great importance, and he can easily make the patient lead a life of misery by his restrictions, or he can take a reasonable degree of risk and allow the patient to do what he finds he can.

Business executives are inclined to ignore the discomforts of coronary disease; hence the tendency for them to die "without warning". Apart from pain or discomfort, there is a warning symptom of early cardiac failure, namely nocturnal polyuria with oliguria by day, which allows the patient to have previous warning of the need to do less—if he is able to interpret the sign. Posture in bed is of great importance, and if the patient is not comfortable lying down, he should be allowed to have extra pillows.

Dr Leak stresses the need to listen carefully to all that the patient has to say, and to place due weight upon it. This will assist accurate diagnosis, will instill confidence into the patient, and will help to make his treatment that of a patient and not that of a case.