LUMBAGO.

By W. S. C. COPEMAN, M.A., M.B., M.R.C.P.

Physician, British Red Cross Clinic for Rheumatism; Asst. Physician, Children's Department, West London Hospital; Asst. Physician, Hospital of St. John and Elizabeth.

Definition.

Lumbago is a generic term for fibrositis in the muscles or ligamentous structures of the back. Llewellyn believes it to be a manifestation of gout and it certainly appears to be true that a seasonal incidence can be observed in those patients prone to its ravages, whilst, in addition, it tends to occur much more frequently in middle-aged men than it does in women. Its onset is commonly acute, in which case there may be slight pyrexia during the initial stages, although this never rises above 99° - 100° . If the sufferer is not dealt with during this period a long and painful chronic phase may in most cases be looked forward to, and it is during this period of the disease that the therapeutic resources and patience of the average practitioner are so severely taxed.

Diagnosis.

The acute form must be carefully differentiated from certain other pathological entities which tend to concentrate their activities in the lumbar area. Amongst these may be mentioned influenza, osteo-myelitis of the lumbar or sacral spine, spinal meningitis, tuberculous caries with or without collapse of a vertebra, spinal curvature, myelitis, the results of acute trauma and *B. coli* infections of the urine. Hydronephrosis and renal calculus may also give rise to pain simulating that of acute lumbago. I have also on one occasion seen the early stage of herpes zoster diagnosed for a day or two as acute lumbago. With careful examination, however, it is generally possible to make one's differential diagnosis definitely within a day or two.

With regard to trauma, there would naturally in most cases be a definite history of this, although it is worth recording that in two recent cases X-ray examination has disclosed a fracture of the spinous or transverse processes of one vertebra with no history other than that of apparently a severe wrench—in one case whilst alighting from a bus, and in the other whilst playing football.

In true lumbago the general health will usually be unaffected, although the patient's temper is generally bad. If the inflammation is in the lower lumbar or sacral region, and more particularly in the fibrous aponeurosis which surrounds the sacro-iliac joint, it is not uncommon for an extension of the inflammatory process to take place directly to the sheath of the sciatic nerve. Where sciatica follows lumbago in this fashion by direct extension, the prognosis for the latter is generally considerably better with treatment than in those forms of sciatica arising from other and more obscure causes. Such an extension from the aponeurosis to the sheath of the nerve should, however, in most cases not be allowed to occur at all and will not do so if prompt and efficient treatment is directed towards the lumbago in the acute stage.

The chronic form of lumbago must also be differentiated from certain other lesions which may manifest themselves in this region. Chronic sacro-iliac strain, which is reported as being a common disability on the other side of the Atlantic, would appear to be somewhat less frequently met with in this country. In this condition the patient will generally tend to lie on his unaffected side, whilst in

most cases of true lumbago it will be found that he prefers to lie flat on his back, in such a position that all the muscles of this region may be adequately relaxed, for it is only on muscular movement that the pain in the uncomplicated case of lumbago occurs.

The localisation of the chief pain and tenderness to these joints is also an indication that the lesion must be looked for in their neighbourhood, rather than in the lumbar muscles, whilst an increase of pain on moving them will confirm this. The method recommended by Mennell whereby the sacro-iliac joints may be tested should be mentioned here as being of great value in differentiating lumbago from lesions of the sacro-iliac joints: to move the right sacro-iliac joint the patient should be placed recumbent on his left side, the left knee flexed up onto the abdomen and firmly clasped there by him. The right hip is then flexed by the examiner whilst the patient keeps his knee straight. This will produce what is termed "forward tortion strain" in this joint and induce pain if it be diseased.

Other conditions which must be differentiated from chronic lumbago will again include trauma, syphilitic meningitis, gonococcal infection, chronic caries, renal calculus, internal piles, oxaluria, enlarged prostate, carcinoma of the rectum and a sacralised fifth lumbar vertebra. In this last mentioned condition the lateral process of this bone is congenitally enlarged to such an extent that it has to articulate with the ilium, an extra joint being thus formed which is particularly liable to stress and traumatic influences. This is generally diagnosed by means of the X-rays.

A further most important and not very generally recognised cause of chronic "lumbago" with which I meet several times every year is secondary carcinomatous deposits in the lumbar vertebræ, the primary growth, which is often not discoverable, being presumably in the prostate, stomach, or thyroid gland.

Finally, it must be pointed out that a postural ache will often develop in the lumbar region of persons with a prominent abdomen associated with flat feet: more particularly is this the case in heavy women at or around the period of the menopause.

Various gynecological abnormalities may also be responsible for "chronic lumbago". Such conditions tend mostly to become exacerbated before and at the time of the monthly period. It seems likely, however, that the existence of such lesions is assumed too laxly in many cases, and it is not unusual to find that patients complaining of a pain in the back are sent without previous examination to see a gynecologist. Gynecological abnormalities do not account, in my experience, for chronic backache in more than 10 to 20 per cent. of the total cases of backache seen.

It must finally be remembered that a true arthritic condition of the lumbar spine, or of the sacro-iliac joints, may be the causative factor of chronic backache or lumbago.

It will be realised from what has been already said that the diagnosis of lumbago should not be made too lightly and without a full physical examination, since several very severe conditions may masquerade in this form and it may not be realised in such cases by the patient or the doctor that early treatment is essential. An X-ray examination is a necessity in all examples which last for more than a week and should be carried out as a routine measure.

Treatment.

The scheme of treatment in cases of true lumbago (which will include those of traumatic origin, although it will be realised that treatment of these latter is likely to take a longer period before success is achieved) will be threefold: (1) A general eliminative action; (2) local muscular rest and analgesia; and (3) tonic treatment, both generally and locally, when once the acute symptoms have passed off, for there is no disorder which seems to "take it out of" a patient more rapidly and more thoroughly than lumbago.

With regard to the measures aiming at general toxic elimination, a purge should be administered at the very earliest possible opportunity. It has seemed to me that calomel is probably the most efficient agent in these cases, and it should be followed by a large dose of salts. With elderly patients, however, who wish to stick to their own pet purgative it is wise, as a rule, to allow them to follow their inclination. Subsequently, it is advisable to order a daily morning dose of salts during the period of treatment.

If the patient is sufficiently mobile to be able to leave his bed, a few minutes immersion in a very hot bath, to which a few tablespoonfuls of mustard have been added and well stirred in, is good treatment, provided that immediate return to bed between blankets and local rubbing (or, better still, skilled massage) with an analgesic ointment be insisted upon. If the patient be allowed to delay his return to bed chill will probably result and the case become chronic. If it be found impossible for the patient to leave his bed, the aid of a local radiant heat or infra-red ray lamp must be invoked and an exposure of 20 to 30 minutes given and followed up with deep massage, in order that the inflammatory nodules which are commonly present in this area, lying amongst the muscular fibres, may be sought out and fully broken up.

If these measures are not available, exposure to an ordinary gas fire will be found quite efficient, for this contains a considerable percentage of infra-red rays.

If the bath and the infra-red ray treatments are both available, and the patient is able to submit to these, it will be found that the conjoint treatment will be an improvement on either separately; one may be employed in the morning whilst the other may be given in the evening.

In the later stages of chronic lumbago, when the patient is up and about, it may be found that a weekly Turkish bath will be of value, although with patients over 45-50 it is generally wise to warn them not to enter the hottest room but to be content with that amount of perspiration which can be obtained in the other two. This should seldom, if ever, be permitted on more than one occasion during a week.

Local counter-irritation is often advisable in really acute cases of lumbago, and may also be found to be extremely useful even in those of longer standing. Various methods of applying this are time-honoured, amongst which may be mentioned a hot flat-iron, which is applied directly to the area, a layer of stout brown paper intervening between the iron and the skin. Another method is to employ an ordinary stout platinum loop, such as is used for bacteriological work, heated to redness by a spirit lamp at the bedside and firmly applied momentarily to the skin over the affected area in several places a few inches apart. An electric cautery is a more scientific method of doing the same thing, whilst a strong erythema dose of ultra-violet light is at times very successful. The old-fashioned method of "needling" is also worth a trial. This consists merely in puncturing the skin and

deep fibrous aponeurosis of the patient at the points of maximum tenderness, presumably thus relieving the tension in small local areas of effusion. Blistering is not generally advisable owing to the difficulty found by the patient in lying on the part afterwards if the blister be a large one.

With regard to the drug treatment of lumbago, it is traditional to pin one's faith to the salicylate group and certainly aspirin will usually be found to be a great stand-by in such cases. The other members of the group are not, however, in my experience successful. Potassium iodide is generally recommended but, like sodium salicylate, it is a powerful depressant, and patients suffering with acute or chronic lumbago are generally in the depths of depression from the very painful nature of their disease. I do not therefore often employ these drugs in such cases. Atophan is sometimes given and may be useful, but it has recently been pointed out by Willcox, amongst others, that there are considerable dangers attached to the exhibition of the drugs of this group. If used at all, it should not be ordered in routine fashion but should be given only on two days running in each week—and even then only for a limited period—in doses not exceeding grs. $7\frac{1}{2}$.

When the pain begins to disappear a tonic should be substituted, such as Easton's Syrup or "Bynin Amara," for a considerable period.

If the onset of the lumbago is acute, the application of a belladonna plaster is sometimes helpful and has the virtue of being time-honoured. It seems, however, to be unlikely that its action really extends beyond the immobilisation of the muscles in the lumbar area, the value of the belladonna being problematical. It is well, when applying such a plaster, to more than cover the area of pain complained of and to cross the mid-line, in order to immobilise as far as possible all the muscles of these areas.

Dietetically, starvation, with a plentiful ingestion of fluids, is desirable for the first two or three days, more particularly in those patients of a plethoric build. There is no reason in my opinion why spirits should not be allowed during this period, since such patients are generally accustomed to their ingestion and tend to become unduly depressed if they are removed. It is not, moreover, the alcoholic content, but rather the proteins and ferments which are incidental to the preparation of wines and beers, and which are absent in spirits, which are harmful to such patients. Subsequently, a low and largely vegetarian diet should be instituted, whilst, unless the patient has an idiosyncrasy to fresh fruit, a plentiful consumption of this should be encouraged. Possible exceptions are rhubarb, strawberries and tomatoes, which may tend to increase any oxaluria that may be present. When the symptoms have disappeared, it seems unnecessary to forbid meat for any prolonged period, although it is probably better to limit this to once a day.

Convalescence.

The patient who has just recovered from an acute attack of lumbago is generally considerably "below par" for a surprisingly long time afterwards and a holiday in some bracing resort, with "tonic" treatment, for a month or so is usually advisable if the patient's financial position can possibly warrant this. The South-east coast often seems to suit these patients best, or a short sea cruise which is not going into the tropics. Such tonic treatment will, in addition to the medicinal aspect, include measures among which may be mentioned ultra-violet light baths, sea-water baths, general massage to be followed by rest two

or three times a week, or in fine weather sea bathing if subsequent chill can be guarded against. If the Vichy douche-massage bath is available at a neighbouring clinic or spa, this is probably the ideal method of treatment for such cases at almost any stage, combining as it does in one treatment the three *desiderata* of physio-therapy, heat, movement and massage.

Advice as to the prevention of the recurrence of lumbago should include common sense principles such as moderation in all things, including recreations of the nature of gardening, which involve lumbar strain, and work if this is conducive to the localisation of such attacks; the avoidance of any mild trauma, such as starting a car by hand, which may be known to aggravate the condition must also be insisted upon; and, finally, the necessity for early medical assistance in the event of a relapse before the condition has had time to re-establish itself must be emphasized.

STENOSIS OF THE ŒSOPHAGUS.

By RONALD W. RAVEN, F.R.C.S. (ENG.)

This subject is of great practical importance to the doctor and patient. The former is often confronted with almost unsurmountable difficulties when deciding upon the treatment to be adopted and the latter has generally to face a grave prognosis. At the present time the surgery of the œsophagus is being developed and increasing numbers of operations are being performed for pathological conditions which hitherto were regarded as hopeless. Further progress will be made in the future based upon experimental work which is now proceeding. The time appears opportune for a review of some common varieties of œsophageal stenosis with the management thereof.

A.—Congenital Stenosis.

Congenital œsophageal stenosis is more common than is generally supposed. Doubtless many patients die without the correct diagnosis having been made. These patients are infants one or two weeks old who are brought because they are unable to retain their food and are considered to vomit everything. The majority of such infants die, but there is a minority which can be saved providing the correct diagnosis is made and adequate treatment instituted.

Numerous varieties of congenital deformity of the œsophagus have been described; I will confine my remarks to the following types:—

1.—Complete Œsophageal Stenosis with Œsophago-Tracheal Fistula.

The marked constancy of the morphology of this condition has been recognised by many observers. The œsophagus commences in the usual way but ends blindly forming a thin sac whose lower end is about the level of the bifurcation of the trachea. The upper end of the lower segment of the œsophagus opens into the trachea at the bifurcation or a short distance above, forming an œsophago-tracheal fistula. In some cases the œsophagus opens into a bronchus. The embryological significance of this abnormality is not fully understood, but it evidently is an expression of an early fundamental change in the embryo. It is not surprising that such abnormalities should sometimes occur when we consider the intricacies of the development of this region.