

HERMAN WAHREN, LUDVIKA :

ON TREATMENT OF SCIATICA WITH PLASTER
CORSET

One naturally hesitates in suggesting any new measures for the treatment of sciatica. It is obvious that this disease, the chief symptom of which is pain, must be amenable to many widely different methods of treatment, ranging from injection into the sciatic nerve to tonsillektomy.

Besides the pain in the back and extremities there are also other, rather constant, symptoms, above all the Kernig-Lasegue symptom. In addition, according to my experience, there is another sign that is almost as constant as the pain and sensation of tension on elevation of the leg—namely, a stiff and crippled lumbar back.

If a sciatic patient is asked to bend forwards, he performs the flexion in the hip-joint, the lumbar part of the back being kept rigid, failing to curve as in a normal person. Often the extensors of the back are found to be very tense in muscular defense.

It is fully acknowledged that sciatica is not a disease *sui generis*, but a symptom that may be due to widely different causes. Thus the typical pains in the hip and leg may be elicited through greatly differing mechanisms. It is not practicable in detail to follow the causal sequence in these cases. In the general clinical picture of ischias, however, there are many things that suggest that the pain is elicited through a disturbance of the supporting function of the back; but, of course, this does not imply that the primary cause of the disease must necessarily be localized to the back.

This point, I think, may be illustrated very well by the following cases under my observation. I have had two patients who were suffering from typical sciatica. On roentgenography of the pelvis they both presented a unilateral shallow acetabulum as the probable cause of the sciatica, with the upper margin of the acetabulum sloping upwards. Both patients showed a markedly contracted lumbar back, and both responded particularly well to the plaster corset. In the corset they immediately became free from symptoms. So obviously it is possible by means of a supporting bandage symptomatically to produce a favourable effect on the process even though this means no causal therapy.

In 1930 I made a comparative analysis of the orthopedic clinic material of cases of the so-called sciatic scoliosis. It was perfectly surprising how rapidly the pain was relieved in these cases on application of a suitable plaster corset. The treatment consists in correction of the posture by repeated application of corsets, and nearly all the patients became free from pain, if not before, at any rate in the last corset, after the posture was corrected. Since I left the orthopedic clinic, I have always continued with this form of treatment, employing it also in ordinary cases of sciatica where there has not been ascertained any lateral twisting of the back.

In order to get an idea about the effectivity of this therapy I employed the above treatment in all cases of sciatica that have applied to the out-patient department of the Ludvika Hospital. The patients have been hospitalized. The pelvis and lumbar part of the vertebral column have been roentgenographed. Lumbar puncture has been performed in most of the cases. For the rest, the usual routine examination has been carried out. The plaster treatment has been excluded only in one case—because of enormous obesity which made the application of a corset impossible.

Up to the present I have given this treatment to 18 patients, aged from 21 to 52 years. In 13 cases I have obtained a very good primary result. In one case the corset had to be taken off after a couple of days, as the patient had anguish and vomiting. In 3 cases there was only a very slight improvement, if any.

In 1 case the treatment had to be discontinued on account of intercurrent illness.

As to the technique in the application of the corset, I wish to emphasize the importance of the loops that go in front of and under the abdomen and, so to say, raise the abdomen up against the vertebral column. They should be rather tight. I also think that the in-modelling of the corset on the back, in the waist, along the long muscles of the back is of great importance. On the whole, the proper technique in the application of the corset is an important factor. The patient has to feel comfortable with the corset on; if he does not feel that it fits well and gives him relief at once, it has to be removed. In one case I had to reapply the corset three times before the patient and I were satisfied. More recently bandages of cellona have been employed. They certainly are considerably more expensive than plaster corsets, but they weigh less and are more agreeable to wear.

Obviously this treatment involves nothing fundamentally new. It is an unloading therapy, just like rest in bed. Naturally, however, it means an advantage to the patients to be able to walk about; and the treatment further saves the expensive hospital beds for other cases—something that means a great deal to a small and heavily burdened country hospital.