The cervico-lumbar syndrome

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Low back pain literature fills entire walls – an indication of the clinical importance of the problem. Two thirds of the cases commonly considered as 'vertebrogenic' are localized in the lumbar region\(^3\), and almost everybody will undergo a attack of low back pain some time\(^15\).

Being of considerable interest to all of us, many diagnostic and therapeutic approaches have been made to this problem. Alas, it has proved to be quite elusive. The intervertebral disc played its role as a main villain for some decades, and since the 1950s we have known about the importance of ligamental overstrain\(^10,13\). To remind readers of the importance of lumbar blockages or malfunctions of the sacroiliac joints seems a little superfluous. But still there are problem cases that this pathogenic framework does not seem to cover, especially as the enthusiasm for operations faded with every long-term study published.

DEFINITION

We define the cervico-lumbar syndrome as a clinical entity in which lumbar symptoms are mainly triggered and maintained by functional disorders of the occipito-cervical joints. Best proof is *ex juvantibus* the subsiding of the patient's complaints, but some anamnestic and clinical signs attract our attention to this cause.

In the 1930s DeKleijn and Nieuwenhuyse published on the influence of the neck afferents on vertigo\(^4\). Gutmann documented the importance of this region in dorso-lumbar ailments in 1957\(^6\); the underlying neurophysiological mechanisms are much better understood today, as anatomical\(^2\), biomechanical\(^17\) and neurophysiological research\(^5,14,18\) help us to replace educated guesses by logical reasoning. Short pathways to the formatio reticularis, and close connections with the centres responsible for the programming of the postural muscles\(^8\) explain the immediate effect of blockages between C0 and C3 on postural stability\(^1\).

The significance of functional disorders of the cervico-occipital joints for headaches, brachialgia or pain in the neck and upper thorax is accepted and
documented; their influence on lumbar syndrome is less well known.

The problem in the differential diagnosis stems from the ‘monolayer’ approach: we are used to ask for one principal reason, and, being visual animals, we look for a visible proof. Furthermore, we prefer a local reason to something farther away, especially when mechanical factors are involved.

Very often, the upper cervical spine is the leading factor in the generation of lumbar pain but acts through a local ‘relay station’. This role can be taken over by all the classical reasons for sciatic pain, e.g. lumbar osteochondrosis, ligamentous insufficiency, morphological asymmetry or even the degenerated disc. Treating these local co-factors can also be successful, but it takes time. We do not wish to discourage this local therapy but to complement it with the treatment of the upper cervical spine to maximize efficiency and minimize morbidity.

A QUANTITATIVE TEST

Having known for some time that lumbar syndromes respond favourably to the manipulation of the occipito-cervical joints, we decided to check the effect by examining the patients of the ‘spinal column consultation’ of our out-patient clinic. We asked the patients to compare their situation before and 3–4 weeks after the treatment (when they came back for the follow-up examination). After that, additional therapies were applied, for example physiotherapy, local injections, electrotherapy, re-education of motor patterns, etc. We decided to form groups based on the first interview and to define the patients suffering from a cervico-lumbalgia by several parameters (Table 35.1).

Table 35.1 Criteria for the selection of patients with ‘cervico-lumbar syndrome’

- Age between 15 and 45 years (mean, 26 years)
- Purely ‘lumbar’ symptoms
- No signs of radicular irritation
- No accompanying diseases
- No morphological findings on radiographies
- Manipulation of upper cervical spine the only treatment

The patients were sent by local practitioners (73%) or came themselves on the advice of friends or relatives (27%). Taking into account that the allotment was somewhat arbitrary, as there are no sharp distinctions between the groups, the overall distribution was as follows. Children below the age of 15 were excluded because their complaints are in almost every case not confined to the low back (including them would have made our success rate much higher); patients over 45 years of age were excluded because morphological changes are