

## LOW BACK PAIN - ORTHOPAEDICS

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*As a new surgical technique spondylolysis hook screw used in our clinic in 7 cases with low back pain. Rigid internal fixation of pars interarticularis defect is achieved by this intervention. This operation is technically simple. Spondylolysis is stabilized without sacrifice of a motion segment. With the hook and screw strong compression can be exerted on the spondylolysis. This rigid internal fixation provides relief of pain.*

*We believe that more than expected number of patients with low back pain can be treated in our clinics.*

It must be remembered that low back pain is a symptom and not a disease. The causes are manifold but may be classified under the following headings: (1)

Psychogenic back pain

Viscerogenic back pain

Vascular back pain

Neurogenic back pain.

Spondylogenic back pain.

"pain drawing " gives a good deal of VALUABLE INFORMATION about both physical and psychological problems. (2)

Viscerogenic back pain may be derived from disorders of the kidneys or other organs, retroperitoneal tumors, sac problems. The pain is not aggravated by activity, nor is it relieved by rest. Backache is rarely the sole symptom of visceral disease.

**Vascular back pain** : Abdominal aneurysms may present deep lumbar pain unrelated to activity.

**Neurogenic back pain** : The pathological lesions most likely to give rise to confusion in diagnosis are neurofibromatosis, neurolemmoma, ependymoma and other cysts and tumors involving the nerve roots that usually occurs in the upper spine. Frequently patients give a history of having to get out of bed at night to walk around in order to obtain relief of their symptoms.

**Spondylogenic back pain** : May be defined as pain derived from the spinal column and its associated structures. The pain is aggravated by activities and is relieved by recumbency.

These lesions are most common source of low back pain.

The clinical lesions will be considered in the following order:

Posterior facet syndrome, sacroiliac joint syndrome, Maigne's syndrome, myofascial syndrome, herniation of nucleus pulposus, lateral lumbar spinal nerve entrapment, radicular pain, central spinal stenosis, degenerative spondylolisthesis and isthmial spondylolisthesis.

The purpose of this paper is the presentation of our experience of a new surgical intervention for the isthmial spondylolisthesis. This surgical technique has been developed by Prof. Morscher in 1984.

In 1970 Buck suggested direct repair of the spondylolisthesis by means of screwing. (3)... Later Jakab (4) reported 16 patients treated by screw.

Because of the problems which occurred with simple screwing Prof. Morscher presented this intervention as a new step.

### MATERIAL AND METHOD

The vertebral arches are exposed subperiosteally up to the articular processes. The two hooks are pushed from caudal over the vertebral arch and oriented to the base of the upper articular process.

Connective tissue in the area of spondylolisthesis is removed. Cortical cancellous block from the iliac crest is inserted.

In the period from June 1989 to April 1990. 7 patients with an average 26 years underwent the described procedure at our clinic. A total of 11 spondylolyses were stabilized. The mean follow up period was 5 months.

### RESULT

Only 1 early result was obtained. 6 patients were completely free of pain. But one patient, 45 years old, still has radicular pain.

### DISCUSSIONS

The operation is technically simple. Stabilization is obtained without sacrifice of a segment. Since the

screw thread is outside the actual area of spondylolysis, corresponding space remains free for bone grafting. Hook and screw provide strong compression on the spondylolysis, this internal fixation provides relief from pain. (5)

Unfortunately in our orthopaedic clinics low back pain has not received the attention it deserves. We believe that more than expected number of patients with low back pain can be treated in our clinics.

## REFERENCES

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