

## PROCEEDINGS OF THE FINNISH ORTHOPAEDIC ASSOCIATION

*Kuopio, Finland, May 20, 1977*

EDITOR: A. ALHO

### INCIDENCE OF THROMBOEMBOLISM IN ELECTIVE HIP SURGERY

*O. Suomalainen*

University Central Hospital, Kuopio

Thromboembolic complications were analyzed in a series of 38 total hip replacements, 25 intertrochanteric osteotomies, and three endoprosthesis applications. Warfarin was used for prophylactic anticoagulation. Thrombosis was diagnosed using a preoperative and postoperative  $I^{125}$  fibrinogen test. In addition,  $Tc^{99m}$  venography was performed in conjunction with perfusion lung scanning. Ventilation lung scanning was obtained simultaneously using xenon<sup>133</sup>. Positive cases of thrombosis were also examined by contrast venography. A total of 23 (35 per cent) deep venous thromboses were diagnosed using  $I^{125}$  fibrinogen: nine of these (14 per cent) were bilateral. Radionuclide venography using  $Tc^{99m}$  gave frequencies of 26 (39 per cent) and 7 (14 per cent), respectively. A clinical diagnosis of thrombosis was made in 16 cases (24 per cent). The same frequency, 24 per cent, was obtained by contrast venography. Ventilation perfusion lung scanning revealed nine lung emboli (14 per cent). Five patients had clinical symptoms of pulmonary embolism.

### LUMBAR SPINAL STENOSIS

*V. Rehnberg*

University Central Hospital, Kuopio

Between April 1975 and November 1976 a total of 29 patients were operated on for spinal stenosis at Kuopio University Central Hospital. This accounts for 13.9 per cent of all disc operations performed during that period. The average age of the patients was 47.8 years (20 to 66 years). Preoperatively, back and leg pain were the most common complaints, both occurring in about 90 per cent of the series. Nineteen patients (65.5 per cent) had cauda equina-type intermittent claudication.

A positive Lasègue (SLR) sign was found in 12 patients (41.6 per cent). The most common neurological disturbances found were the absence of the Achilles reflex (12 patients), a decrease in the power of the toe extensors (8 patients) and hypaesthesia corresponding to dermatomes L5 or S1 (13 patients in all). According to the X-ray findings five (17.2 per cent) of the patients were considered to have congenital stenosis, while the stenosis in the rest was mainly degenerative in origin.

The operation consisted of a decompressive laminectomy, usually performed on two levels. In no case was spinal fusion performed. The average postoperative follow-up was 13.3 months. The results were excellent or good in 65.5 per cent of the patients.

### TREATMENT OF TROCHANTERIC FRACTURES OF THE FEMUR USING THE ENDER METHOD

*V. Rehnberg & S. Pelttari*

University Central Hospital, Kuopio

Intramedullary Ender nails have been used in the treatment of trochanteric fractures of the hip in Kuopio since March 1976. Reference is made to the first series of 27 patients treated by using this method. The mean age was 77 years. The average duration of the operation was 47 minutes. The blood loss varied from minimal loss to 200 ml. One patient died postoperatively due to myocardial infarction.

The fact that the distal ends of the nails in the beginning were not fixed with screws accounts for most of the complications. In four instances one or more of the nails had to be removed because they slid downwards. In one patient this caused non-union and in another wound infection. In one case a reoperation had to be performed using a Jewett nail. Minor sliding of the nails often caused pain at the site of insertion and in one case it caused healing of the fracture in a marked varus

position. Another healed in a rotational malposition.

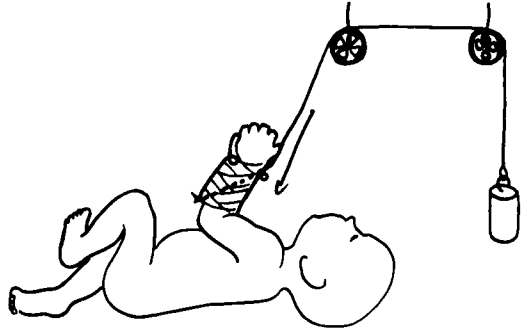
The Ender method has three advantages: it is not technically difficult, it reduces operative stress to a minimum, and allows immediate postoperative weight-bearing.

#### PRIMARY TREATMENT OF BRACHIAL PLEXUS PALSY WITH DYNAMIC TRACTION

*L. Lindell*

Dept. of Paediatric Surgery, University Central Hospital, Kuopio

A series of 23 newly born babies with brachial plexus palsy were treated with dynamic traction and additional physiotherapy (see Figure). Eleven out of nineteen cases of  $C_5$ - $C_6$  spinal root involvement (Erb's palsy) recovered in 1-5 months (mean 3 months); a further four cases recovered in 10-25 months (mean 16 months). Two recovered without treatment and another two developed significant handicaps, as did a further four cases with  $C_5$ - $C_7$ - $C_8$  involvements. One severe case underwent surgery as primary treatment.



Dynamic traction effectively activates the paretic arm and this regimen is easy to carry out at home, too. As it gives evidence of the trend in recovery more rapidly than any other current method of treatment, it reveals resistant cases early enough to enable surgical correction. In all cases of brachial plexus palsy, dynamic traction treatment is indicated because the extent of involvement does not necessarily correlate with the speed and extent of recovery.