Acta orthop. scand. *54*, 529–530, 1983

PROCEEDINGS OF THE FINNISH ORTHOPAEDIC ASSOCIATION

Helsinki, November 12, 1981

EDITOR: KALEVI ÖSTERMAN

ATLANTO-AXIAL SUBLUXATION (AAS) IN RHEUMATOID ARTHRITIS. A COMPARISON OF CLINICAL SYMPTOMS AND RADIOGRAPHIC CHANGES

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According to the literature there is no clear correlation between radiographic findings and clinical signs in patients with atlanto-axial subluxation (AAS) in rheumatoid arthritis. A series of 42 severe AAS patients was divided into two groups on the basis of their clinical symptoms. Group I comprised 25 patients with spinal cord symptoms and group II, 17 patients with persistent pain in the occiput or the neck. The radiographs of the groups were examined for AAS using four methods: 1) atlanto-axial separation in millimeters, 2) relative narrowing of the medullary canal (%), 3) maximal distance of the dome of the odontoid from the basilar line (Thiebaut-Wackenheim's line). 4) maximum distance of the odontoid from the level of the foramen magnum (Mc Rae's line).

There was no statistically significant difference between the two groups. None of the radiographic measurements correlated with the concurrent neurological symptoms.

It is concluded that conventional radiographs do not correlate with or predict medullary symptoms in AAS in rheumatoid patients.

MAIN INJURIES IN FATAL MOTOR VEHICLE ACCIDENTS

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The authors investigated the causes of 2645 deaths and factors associated with them in fatal motor vehicle accidents from 1972 to 1979. Data was obtained from the records of the national board for traffic accident investigation. 2216 of the victims (83.8%) had died in automobile accidents, 134 (5.1%) in accidents involving heavy vehicles and 295 (11.1%) with motor-cycles or mopeds. 75.6% of the victims were male. The victims of motor cycle accident were significantly younger ($P < 0.001$) than in the other groups. With regard to all the victims, head injuries were the most common cause of death (48.6%, but 65.6% in motor-cycle accidents). Fifty per cent of the injured had multiple injuries. 74.8% of all the victims had died before medical examination and 93.2% during the first 24 h. The position of the victims in automobiles had a significant ($P < 0.01$) effect on the injury profile: The use of seat belts had very little effect on the injury profile. However, the investigation boards estimate that seat belts could have saved 851 lives from 1972 to 1979. The number of victims found to be under the influence of alcohol has increased during the past decade.

OUTCOME OF SPORT INJURIES

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In the present investigation the outcome of acute sport injuries were analyzed among 2471 patients treated at the casualty department during 1 year. Information was obtained from their files and a questionnaire. During the investigation period 10% of all casualty department patients had a sports injury. The time to follow-up was always more than 18 months. 73% of the patients were men, average age 26 years. Football and indoor ball games each caused 23%, ice hockey caused 14% and track and field injuries only 3% of the injuries. The lower extremities were injured in 44%, half of the in-

juries sustained in ice hockey and horse riding were to the head or neck. The trunk was injured most often in weight lifting.

At the follow-up, ligamentous injuries of the lower extremities, fractures and dislocation were the major causes of discomfort. Half of patients had to give up training for more than 4 weeks and 2% completely. In track and field events the injury seldom disturbed training for more than 1 week, but in football, indoor ball games and ice hockey the rest period averaged between 4 and 5 weeks. According to the present investigation sports injuries were, in the majority of cases, benign and sick leave seldom exceeded 2 weeks.

SEIDEL® MEDULLARY PLUG IN ENDOPROTHESIS SURGERY

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Plugging the medullary canal of the femur with a Seidel® medullary plug prior to the insertion of femoral cement and a femoral prosthesis was compared to similar cement and femoral component insertion into the femur without plugging the canal. Twenty-nine Lubinus® prostheses, inserted using the compression cementing technique and the Seidel® medullary plug were compared with 29 Lubinus prostheses inserted without the compression cementing technique and the medullary plug. Four Thompson® prostheses using Seidel medullary plugs were also compared with 33 Thompson and Brunswik® prostheses without medullary plugs. The filling index was determined.

The filling index in both groups was an average of 30% greater with medullary plugs and the compression cementing technique. Plugging appears to be of benefit in cement fixation of the femoral component of total endoprosthesis hip replacement.

FRACTURES OF THE TALUS

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The investigation consists of 50 patients treated during the period 1970–77. Of the 35 patients followed up, 27 were men and eight women, mean age 39 years. In 15 cases the fracture was caused by falling from a height and in 13 by a traffic accident. 16 patients had a fracture of the neck and 13 of the body of the talus. None of patients had posterior dislocation of the body of the talus, which is considered to be the type of fracture most insulting circulation of the talus. Sixteen of the fractures were solitary and 19 patients had other injuries. The treatment consisted of: plaster cast immobilization in 16 cases and closed reduction and a plaster cast in eight patients. Eleven fractures were treated surgically. Average immobilization was 8 weeks.

At the follow-up, 19 patients had osteoarthritis in the talocrural or in the subtalar joint. A subtalar arthrodesis was performed in four patients. Dislocation of the fracture after reduction had a significant correlation ($P < 0.01$) with both the severity and frequency of arthrosis and pain. Nineteen of the patients reported no discomfort and none had pain at rest.

Twelve patients suffered pain during stressed exercise and four at each step. The treatment did not affect the results, but the grade of reduction, regardless of the mode of treatment, was significant ($P < 0.01$).