

cally and histomorphologically. Control groups consisted of a mere diaphyseal femur defect group and a cortical bone graft group. Sixty young rats were operated on.

Callus transplants seemed to survive and maintain their osteogenic capacity. The inductive new bone formation of the host bone was concentrated to the edges of the defect in both the periosteum and endosteum. In the other series the inductive new bone formation started in the periphery of the host bone and gradually reached the trauma site.

In the histomorphometric analysis the total amount of new bone formation was greatest in the callus group and least in the bone graft group. The bone grafts incorporated in 3 to 6 weeks after transplantation to the host.

### Accessory nerve injury

Martti Vastamäki

Orthopedic Hospital of the Invalid Foundation, Helsinki, Finland

Twenty-nine patients with an injury of the accessory nerve in the posterior cervical triangle are presented. There were 8 male and 21 female patients, mean age at injury 36 (1-62) years. In 21 patients the nerve was damaged during a lymph node biopsy, in 4 patients during a large neck operation, in 2 cases there was a sharp glass injury, and in 2 cases a blunt contusion. Twenty-one patients were operated on. In 14 cases neurolysis, in 3 neurotomy, and in 4 cases reconstruction with a sural nerve graft was performed on an

average of 11 months (2 mos.-5 yrs.) after the injury. In neurolysis cases the cause of symptoms was scar tissue compression. In 5 cases, signs of satisfactory recovery were found at the first consultation and operation was deemed unnecessary. In 3 cases too long a time (6-17 yrs) had elapsed after the injury.

The result was good (normal strength and range of motion of the shoulder, no atrophy, no pain) in 7 operative cases and fair (normal range of motion, normal or almost normal strength of the shoulder, atrophy of the trapezius muscle, no or slight pain) in 8 cases. In 1 case good and in 4 cases fair recovery was achieved without operation. In 9 cases (31%) the result was poor. The mean follow up time was 13 months in operative and 5 years in conservative cases.

The superficial course of the accessory nerve in the posterior cervical triangle makes it susceptible to injury during a lymph node biopsy etc. in this region. When the nerve is damaged during a surgical operation, the patient may immediately notice pain in the shoulder, in the axilla, or in the occipital scalp. Occasionally, pain does not appear until the patient has begun to move about and to resume work. Paresis of the superior portion of the trapezius muscle (lowering of the shoulder, a hollow in the supraclavicular region, inability to abduct the arm above the horizontal level) is a dominant diagnostic sign.

When the diagnosis of the lesion has been ascertained, surgical intervention should be considered. Exploration of the accessory nerve should not be delayed if paralysis of the trapezius muscle has occurred after surgery in the neck region, because neurolysis gives good results. Moreover, neurotomy or reconstruction is easier in the early stage before the formation of large amounts of scar tissue.

### Erratum

The abstract "Total condylar knee replacement in gonarthrosis. Four to six years' follow-up," Acta Orthop. Scand. 57, 601, was written by Per Kjaersgaard-Andersen, Ivan Hvid, Jon-Oddvar Wethelund & Otto Sneppen. In the original abstract, Dr. Kjaersgaard-Andersen's name was not included, for which we apologize.