제한이 있었으며, 시행한 혈관조영술, 골주사 검사상 양호한 혈액순환 및 이식된 비골의 양호한 생존을 확인할 수 있었다. 악성 거대세포종의 개발을 의심할 만한 징후는 없었으며 비골, 요골간에 골유합 진행을 볼 수 있었다.

이상에서와 같이 혈관부착유리비골이식을 통한 원위요골의 악성 거대세포종의 치료는 수술시간이 길고 술후장기간의 고정 및 추시관찰이 필요한 단점이 있으나 비교적 합병증이 적은 우수한 치료방법으로 사료된다.

No. 13.

족배 및 족저부의 조직 확장술로 치료한 골성변형을 동반한 족부 반흔 구측 -1례 보고-

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조직 확장술은 피판술이나 피부 이식술을 대신할 수 있어, 그 기술 및 기구의 발달과 더불어 적응증의 범위도 점차 확대되는 추세이다. 조직 확장기를 이용한 수술은 두안경부 등에서 흔히 사용되어 왔으나, 슬관절 이하 부위에서는 합병증이 흔히 유발될 수 있기 때문에 자주 사용되지 않는 실정이다. 특히 족배 부 및 족저부에서는 그 적응 례를 거의 찾아보기 힘들다. 이러한 이유는, 족배부에 피하 조직이 거의 없 어 피부 직하부에 건, 혈관, 신경 등 확장술에 취약한 구조물이 위치하고 있고, 또한 족저부에는 피부와 지방이 두꺼워 확장중 혈류 장애 및 심한 동통을 유발할 수 있다는, 해부학적 특성에 기인한다고 사료된 다.

저자들은 25세 여자 환자에서 교통 사고 6개월후 제1,2족지의 골성 변형과 동반되어 족배부 제2족지기저부에 형성된 5×4cm의 반흔 구축의 치료에 2개의 조직 확장기를 이용한 조직 확장술을 시행하였다. 확장기는 각각 반흔의 내측 및 외측에 심부 근막하로 삽입하였다. 삽입후 38일간 피부의 상태를 관찰하면서 생리 식염수를 주입하였으며, 확장 속도를 조절함으로써 동통의 거의 없이 확장이 가능하였다. 삽입 39일째에 확장기를 제거한 후 제1,2족지 골성 변형의 교정술과 함께 성공적인 반흔 교정술을 시행하였다. 술후4개월의 추시에서 환자는 기능 및 미용적인 측면에서 만족하였다. 골성 변형을 동반한 족배및 족저부의 반흔 구축 치료에 조직확장기를 이용하여, 피판술을 시행후 발생할 수 있는 피부의 이질성을 피하면서, 기능 및 미용적으로 좋은 결과를 얻어 이를 보고하는 바이다.

No. 14.

슬관절 부위의 악성 및 침윤성 양성골종양에서 시행한 하지 분절 절제 및 회전 성형술

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한 수 봉・우 동 삼

최근들어 항암 화학 요법 및 자기 공명 영상등의 진단 영상 기법의 발전에 따라 악성 골종양에 있어서

biomechanical characteristics of vascularized bone graft, the success rate of this procedure was increased, Eighty seven bone defects patients (eighty nine cases)

Seen from Oct. 1978. to Jan 1993 were managed by means of vascularized bone transfer at Kyung Hee University Hospital. Their least follow up period was 1 year. Fifteen cases were done only fibular transposition and the others were done free vascularized fibular graft. The ratio of male and femals was 60:27, and mean age was 23.6 years old at operation. Mean follow up period was 8 years 10 months (range 1 year 2 months to 13 years 9 months) and mean graft length was 11.7cm. The indications for a vascularized bone transfer included the need for reconstruction of a defect associated with infection in forty seven, a segment of bone after resection of a tumor in eighteen, congenital anomaly in sixteen and non unio without infection in six. The union rate and union time were differ from each indications, Duration for union was 5.8month (range 3.5 months to 1 year 1 month) and over-all rate of union at the last follow up examination was 86.6%. Sufficient hypertrophy of grafted bone was obtained in all cases at the time of last follow up as compared to initial size of grafted bone. Several complications were found such as stress fractures, median and radial nerve palsy. Vascularized fibular transfer for the reconstruction of large skeletal defects is valuable procedure in appropriately selected patients.

No. 13.

Treatment of Scar Contracture and Associated Bony Deformity of Foot with Tissue Expansion —A Case Report—

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Nowadays, tssue expanaion became the one of the popular techniques in the field of reconstructive surgary, which is replacing the flap or the graft surgery. With the development of surgical techniques and the tissue expanders, its indication became broader. Tissue expansion technique has been used mostly for the defect of scalp, face, and neck. However it has been used rarely below the knee, because of frequent complications. For defect of the foot, there had been no report to treat it by tissue expander, in the medline. The tissue of dorsum and sole of the foot is known to be inadequate for expansion. Soft tissue of dorsum of the foot, such as nerves, tendons, and vessels are vulnerable to expansion because of its insufficient subcutaneous tissue. In the sole the thick skin and fat pad can be a mechanical barrier to expansion and may result in significant pain with vascular compromise.

A 25-year old woman who suffered from 5×3cm sized scar contracture on the dorsal aspect of base of 1st and 2nd webs with bony deformity of 1st and 2ne toes, was treated by two tissue expanders inserted into dorsum and sole of the foot. This injury was caused by traffic accident 6 months before operation. Expanders were placed into medial (sole) and lateral (dorsum of foot) side of the scar beneath the deep fascia. Inflation of the expanders with saline, was done carefully not to cause pain, tissue necrosis or infection. Thirty nine days after the insertion, the scar conracture was covered with expanded tissue and

the bony deformity was corrected simultaneously.

Four months after operation, the patient was satisfied with the result in view of function and cosmesis.

We report a successful case treated by tissue expansion technique, for scar contracture and bony deformity of the foot.

No. 15.

Microsurgery for the Failed Back Surgery Syndrome

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Since 1980, microsurgical technique has been applied on the 1000 cases of failed back surgery syndrome to refine the surgical techniques and results.

Contraves Zeiss surgical microscope, the air drill burr, a self-irrigating bipolar coagulator and nerve root suction-retractor are used. Myelography, CT myelography, discography, CT discography and MRI enhancement are also utilized.

The partial hemilaminectomy, medial inferior facetectomy, foramiotomy and posterolateral vertebrectomy were preferred in all cases. Only in 350 cases, discectomy were combined. The various posterior lumbar interbody fusion procedures were added in 122 cases. Results were exellent in 832 cases, improved in 127, and poor in 41.

The following points shouled be emphasized:

- 1. Drilling is much safer than curettage in removing the scar.
- 2. Foraminotomy should be performed thoroughly with a thin punch and drill burr to remove the roof and posterolateral vertebra.
- 3. Facet and endplate should be preserved as much as possible.

No. 16.

Free Vascularized Epiphyseal Transplantation

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It is difficult to manage the growing deformity of long bone followed by epiphyseal injury or congenital anomaly in children, because deformity and discrepancy of limb length ane progressive.

There are many treatment methods of these problems such as lengthening or shortening, corrective osteotomy, epiphysiodesis and bone lengthening through external fixator.

Among many treatment methods, we performed free vascularized epiphyseal transplantation with