No. 25.

### 광배근-전거근 유리피판술을 이용한 광범위 복합 조직 결손의 재건

아주대학교의과대학성형외과학 교실

신예식\* · 박명철 · 이병민 · 김관식

고도의 산업화와 의학의 발달로 인하여 다양하고 복잡한 조직 결손형태가 되면서 이러한 결손을 재건하기 이하여 미세수술 또한 지속적으로 발전하고 있다.

그러나 결손 부위가 매우 광범위하여 한개의 유리피판으로 재건이 불가능한 경우가 발생하게 되어 저자들은 흉배동맥(thoracodorsal a.)을 하나의 혈관경으로 하는 광배근과 전거근을 동시에 사용하여 부피가 큰입체적 결손과 광범위한 결손부를 충분히 재건하여 기능적, 외형적으로 만족할만한 결과를 얻었다.

특히 전거근을 포함하는 경우 주로 하위부분만을 이용하여 상지의 기상운동이 가능하도록 하였다.

그래서 본 저자들은 3례의 종양제거술후와 1례의 외상에 의한, 총 4례의 광범위 연부조직 결손 환자에 이 와같은 방법으로 재건술을 시행하여 좋은 결과를 얻었기에 보고하는 바이다.

No. 26.

### 전박피판의 임성적 이용에 관한 고찰

고려대학교 의과대학 성형외과학교실

김성욱 · 박승하 · 안덕선

저자는 최근 9년간 고려대학교 부속병원에서 시행되었던 전박피판 59예에 대한 분석을 통하여 다양한 임상적용 및 합병증에 관한 고찰을 하였다. 전박피판은 두경부 재건에 43예, 사지의 연조직결손의 피복에 9예, 식도재건에 2예, 그리고 음경재건에 1예가 사용되었다. 또한 골 피부피판의 형태로 하악골의 재건에 4예, 그리고 건-피부피판으로 구순재건이 2예였다. 수부의 연조직 재건으로 역도서형 피판이 7예 이용되었다. 피판은 모두 생존하였으며, 부분적 괴사가 1예 있었다. 공여부 합병증으로 피부 이식의 부분괴사가 2예 있었으며, 3예에서는 수지운동의 장애를 호소하였다. 요골 골절은 발생하지 않았다.

전박피판은 1978년 중국의 Yang Guofan 등에 의해 처음으로 고안된 것으로 요골동맥을 혈관경으로 하여 유리조직이식과 역도서형 피판의 형태로 성형재건외과분야에서 널리 시행되고 있다. 이 피판은 얇고 부드러우며 모공이 적어 다루기가 쉽고 따라서 원하는 모양으로 다양하게 만들수 있으며, 혈관경이 크고 길기때문에 미세혈관 문합이 용이하다는 장점을 가지고 있다.

저자는 전박피판의 임상적용에 대한 고찰을 통하여 그 다양한 이용 가능성과 장, 단점에 관하여 보고하는 바이다. consistency in the proximal part and of very soft consistency on distal end in shape of a rocket. Two silicone prostheses were inserted into the phallic shaft parallel to the neourethra and the bases of the prostheses were fixed to the remnant of pelvic corpus carvenosum so as to transmit erectility of the corpus to the new phallus.

The coronary sulcus of th glans was defined by a full thickness skin graft sub-dermally.

The modified phalloplasty technique was applied to 6 patients who were amputated of their phallus by a dog bite or razor blade injury. Postoperative aesthetic and functional results were followed up from 12 months to 30 months. An urinary bladder sonogram and an uro-flowmetry were included in the follow up to check for residual urine and urinary flow, respectively.

As a complication, in an obese patient the prostheses were extruded without deterioration of the flap. In other patients, all prostheses were functioning, and reported morning erection of about 2-3 cm. The appearance was satisfactory and the urinary flow rate was almost normal in all patients. No residual urine in any patients. All patients have erogenous sensation and in 2 patients sexual penetration was possible about 1 year after phalloplasty.

No. 24.

## The Lateral Supreamalleolar Free Flap - A New Free Flap -

Soo Joong Choi, M.D., Chang Ju Lee, M.D., Won Ho Cho, M.D., Ho Guen Chang, M.D., Young Ho Lee, M.D.

Department of Orthopaedic Surgery, Hallym University, College of Medicine, Seoul, Korea

To cover the soft tissue defects in hand, wrist, forearm, leg or ankle various types of flap have been used. Although lateral supramalleolar flap has been used as the rotation flaps or the reversed island flaps to cover the defects around foot and ankle, there has been no report about its application as a free flap.

The lateral supramalleolar island flap has proved to be supplied constantly by the terminal branch of the perforating branch of the peroneal artery. The free lateral supramalleolar flap has the same skin territory: that is anterolateral aspect of distal lower leg just proximal to ankle. Its vascular pedicle can be extended to the main peroneal artery and its venae concomitantes which can be obtained by dissecting the peroneal vessels between distal tibia and fibula through the interosseous membrane.

We have successfully transferred this free flap in eight patients from April 1994 to February 1995. All of the patients had a full thickness skin defects in the hand, wirst, forearm, leg or ankle which were caused by contact thermal burn, electrical burn, flame burn or traffic accident.

There were no complication.

From our experiences we think that this new free flap - the lateral supramalleolar free flap - have some advantages. Not only it has constant vascular anatomy and long pedicle with large diameter, but also it is a relatively thin flap which has minimal morbidity of donor site.

No. 25.

# Reconstruction of Extensive Compound Defects Using Combined Latissimus Dorsi and Serratus Anterior Flaps

Ye Shik Shin, M.D., Myong Chul Park, M.D., Byeong Min Lee, M.D., Kwan Sik Kim, M.D.

Department of Plastic and Reconstructive Surgery AJou University School of Medicine, Suwon, Korea

Frequently, a single muscle flapp is not enough to cover a large compound defects after extensive trauma or ablation of tumor. For a extensive defects, several kinds of flaps are available for various needs of reconstruction. The combined latissimus dorsi and serratus anterior flaps provide the largest possible soft tissu coverage. Two flaps composed of latissimus dorsi and serratus anterior muscles are consistently nourished through the subscapular-thoracodorsal vessels and their many branches and thus the two flaps can be isolated with one vascular pedicle. We experienced 4 cases of reconstruction in closure of extensive commpound defects using the combined latissimus dorsi and serratus anterior muscles with one vascular pedicled free flap. The advantages of using these flaps are: 1) its versatility and excellent malleability 2) easy to dissection 3) long-stalked pedicle 4) the use of a vascularized rib 5) negligible motor dysfunction from the muscle removal.

Key words: Combined latissimus dorsi and serratus anterior flaps, Subscapular-thoracodorsal vessels

No. 26.

### Clinical Application of the Radial Forearm Flap

Sung Wook Kim, M.D., Seung Ha Park, M.D., Duk Sun Ahn, M.D.

Department of Plastic and Reconstructive Surgery Korea university medical center Seoul, Korea

Fifty-nine consecutive cases treated with the radial forearm flap were reviewed. This flap was used in head and neck reconstruction for 43 patients, soft-tissue cover of an extremity for 9 patients, esophageal reconstruction for 2 patients and penile reconstruction for one patient. Osteocutaneous flaps were used in mandibular reconstruction for 4 patients and tendocutaneous flaps were used in lip reconstruction for 2 patients. In the treatment of 7 patients, reverse island flaps were used for soft-tissue cover of hand.

There was no flap failure and only one partial necrosis, which was healed with secondary intention. Recipient-site complications were developed in few cases and they were healed promptly with quite acceptable appearance. Donor-site complications demonstrated partial necrosis of skin graft in 2 patients and decreased grip strength in one patient. There wasn't any single case of radial fracture..

The radial forearm flap was first decribed by Yang Guofan et al of the Shenyang Military Hospital of China in 1981. This thin, pliable, and predominantly hairless skin of the forearm not only proved to be versatile in dealing with defects of irregular size and shape in the field of head and neck reconstruction, but also proved to be very reliable, and the choice of more veins for anastomosis. It has been used for a variety of defects, such as facial, intraoral, pharynx, larynx, esophagus, hand and penile.

The author concluded that this flap is valuable in a variety of reconstructive applications with acceptable donor site and it is also recommend in taking measures to reduce donor-site morbidity.

Key Words: radial forearm flap