

No. 9

외측 상박 유리피판의 유용성에 관한 재조명: 전박부 유리피판을 대체할 수 있는가?

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목 적 :

외측 상박 유리피판이 보다 널리 임상적으로 사용되게 하기 위한 해부학적 조사와 피판의 작도에 대하여 연구하였으며, 이 피판이 전박부 유리피판을 임상적으로 대체할 수 있는지 조사하였다.

재료 및 결과 :

6구의 신선한 사체 상지에서 해부와 염료주사(dye injection)를 통한 피판의 위치, 크기, 두께, 경계부, 혈관 상태 등을 연구하였으며, 1992년 5월부터 1996년 1월까지 21예의 임상적 적용후, 이의 유용성을 26예의 전박부 유리피판과 비교 분석하였다. 이 결과, 외측 상박 유리피판은 길이 25cm, 폭 10cm의 피판을 만들 수 있었으며, 폭 6cm까지는 피부이식없이 그대로 봉합할 수 있어, 공여부의 반흔이 적어서 여성에게도 적용하기 수월하였다. 혈관경의 길이는 12cm까지 길게 얻을 수 있었으며, 혈관의 굵기도 2mm이상이었고 신경을 포함한 감각피판을 작도할 수 있었다. 수부로 가는 주 혈관인 요골동맥을 회생시켜야 하는 전박부 유리피판과 달리, 외측 상박 유리피판은 상완심동정맥을 사용하여 수부에 대한 혈류의 감소가 없었다. 수술후 공여부의 봉합이 매우 빨라, 수술 시간이 단축되었고, 피판이 다양한 두께를 가지고 있어서, 여러 부위의 수여부에 적용될 수 있었다. 수술후 pinching, grasping 조사시 전박부 유리피판을 사용한 경우보다 변화가 적었다.

결 론 :

외측 상박 유리피판은 얇은 곳에서부터 두꺼운 곳까지 다양한 두께의 피판을 얻을 수 있으며, 긴 혈관경을 얻을 수 있고, 공여부의 단순봉합이 가능하며, 상지의 주혈관을 손상시키지 않는 매우 안전하고 유용성이 많은 피판으로써, 전박피판이 필요한 경우 이 피판으로 상당 부분 대체가 가능하리라 생각한다.

No. 8

Wrap-Around Procedure : Its Refinement and Results

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Not only to support existing merits of the wrap around procedure as well to lessen the complications, author refined the procedure in several perspectives. Sculptured dorsally 45° and ventrally 15°, the angulated naturally shaped thumb replic is 10% bigger than normal size; expecting late absorption. To increase vascularized bony contact a bone peg on the proximal end of the graft was created and inserted into the recipient bony socket. More than a half of the distal phalangeal bone of the greater toe was included in the wrap flap. The osseous union was secured with interosseous wiring to promote early exercise. Author applied this procedure in 6 patients. Five patients had an old amputation of their thumb distal to the MP joint and one was congenital hypoplasia of the thumb. Functional recovery and bone resorption rate were followed up for an average 58 months postoperatively.

The appearance of the reconstructed thumbs was excellent. In traumatic cases grip strength restored 72% of normal and key pinch 81% of normal. The congenital case had poorer recording than traumatic cases. Mean two point discrimination was 6mm. The width of the bone graft decreased 21% as usual. Interestingly, however, the length of the bone graft increased 2%. The donor site morbidity was minimal.

Author's modification of the wrap around procedure is suited for reconstruction of amputated thumb in which the MP joint is well preserved. Aesthetic results and sensory restoration were excellent. Restoration of grip and pinch powers is satisfactory. The length of grafted bone increased. The width, however, was decreased as usual. The donor site morbidity is minimal.

No. 9

Revision of Lateral Arm Free Flap : Can it be a Substitute for Radial Forearm Free Flap?

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The lateral arm flap was reported first by Song et al. in 1982. Katsaros and colleagues described an anatomic study and clinical cases in 1984. This flap is thin, has relatively constant vascular anatomy, and provides relatively acceptable scar at the donor site. Despite its many advantages its wide application has been limited by its short vascular pedicle with small diameter of lumen, and its small skin paddle.

We studied its anatomical structure to get longer length of vascular pedicle, wide diameter and thinner part of

flap beyond the lateral condyle through 6 fresh cadaver dissection and dye injection study. We experienced 21 cases of lateral arm free flaps and 26 cases of forearm free flaps from May, 1992 to January, 1996. We compared its usefulness with forearm free flaps in the aspects of donor morbidity, operative factors, quality of flap, and versatility.

In conclusion, lateral arm flap can replace the role of forearm flap in most cases so that patient's donor morbidity can be reduced especially in the women.

No. 10

Lateral Arm Flaps : Its Clinical Applications and Superiority

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Lateral arm flap used for the reconstruction of the defect of head, neck, and extremities, and its range of application is very wide. But traditional lateral arm flap has some limits such as the size of flap, shortness of pedicle, and development of sensory change on the forearm. In this study, we review previous articles and 14 cases used lateral arm flaps for coverage of the varying defect on head and neck, upper and lower extremities successfully. In conclusion, lateral arm flap has constant anatomical structure and can overcome the disabilities of above, in using some advanced techniques.

No. 11

Reverse Digital Artery Island Flap for Finger Tip Reconstruction

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Finger tip injuries represent the most common type of injuries seen in upper extremity. Their managements are important functionally and aesthetically, but at the same time perhaps the most controversial.

From July 1984 to January 1995, 97 fingers in 90 patients with defect of distal phalanx were reconstructed by reverse digital island flaps at the cases and analysed them in several aspects. In 16 cases neurorrhaphy was performed. Majority of the cases were covered primarily and in 21 cases it was used for defect after composite