

EP-030

**요골 전완 유리피판에서 정맥 유출 개선을 위한 단일 대정맥의 전략적 준비**

(Strategic Preparation of a Large Single Vein for improving Venous Outflow in the Radial Forearm Free Flap)



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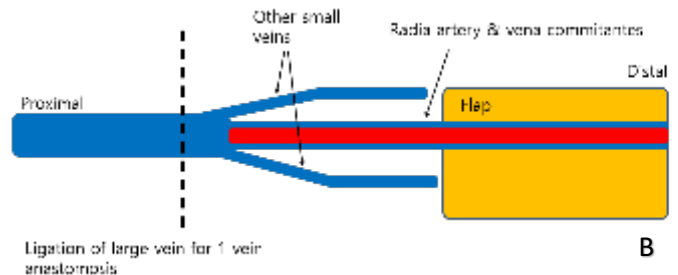
**Purpose:** The radial forearm free flap (RFFF) is a widely used workhorse flap in head and neck reconstruction. Despite its reliability, flap compromise most commonly results from venous outflow insufficiency. In the cervical region, recipient veins are typically large and lack venae comitantes, often leading to caliber mismatch and unfavorable venous drainage when standard distal pedicle dissection is performed.

We present a pedicle preparation strategy aimed at securing a single large-caliber donor vein to improve venous return and flap reliability.

**Methods:** At our institution, a modified pedicle dissection technique was applied in 125 RFFF cases. During flap elevation, the venous pedicle was dissected proximally toward the cubital region to preserve the venous confluence and obtain the largest possible venous caliber, enabling direct end-to-end anastomosis to large cervical veins.(Figure 1) Clinical outcomes and flap survival were evaluated following application of this technique.

**Results:** The donor veins consistently converged near the cubital fossa, allowing preparation of a single large-caliber vein suitable for direct anastomosis to recipient cervical veins such as the external jugular vein. Size mismatch and the need for additional venous manipulation were minimized. Proximal pedicle dissection also improved pedicle positioning and reduced redundancy during inset. With this technique, overall flap survival approached 98–99%, and venous congestion was rarely encountered.

**Conclusion:** Proximal pedicle dissection to secure a large single donor vein improves venous outflow and simplifies microvascular anastomosis in RFFF. This practical and reproducible strategy enhances flap reliability in head and neck reconstruction and may reduce venous complications associated with conventional distal pedicle preparation.



**Figure 1. Modified venous pedicle dissection technique in radial forearm free flap (RFFF).**

(A) Intraoperative photograph showing proximal dissection of the venous pedicle toward the cubital region.

(B) Schematic illustration of the modified technique