

VARIATION OF THE SUPERFICIAL PALMAR BRANCH OF THE RADIAL ARTERY IN RELATION TO FLAP

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Background

The superficial palmar branch (SPB) of radial artery (RA) is an important blood vessel in plastic surgery procedures of hand, being used as axial artery of free flap for finger reconstruction.

Occurrence, diameter and course of arterial branch is variable. The objective was to present clinical cases with SPBRA which will improve our knowledge and its clinical use.

Material and methods

During 1 year were performed 7 free SPBRA flaps from ipsilateral extremity for fingers defects. Intraoperative dissections were carried out in Institute of Emergency Medicine (7 men; age between 30-65 years). Location, existence and diameters of SPB was measured from distal border of radial styloid process. After anatomic study, clinical applications of SPBRA flap were performed.

Results

SPB was present in all cases. It originated at a mean 11.5 mm proximal from radial styloid process. SPB diameter ranged between 0,75-1,6 mm with average 1.29 mm.

Variation in its course was not noted, it traveled transversely over flexor retinaculum (FR). SPBRA flap was raised from over FR area. Average operative time, including dissection-194 min.

Patients were followed up for a mean 11.5 months. No complication concerning donor sites and wrist movements was noted.

Conclusions

In study SPBRA followed a course over FR giving branches that supplies it and the overlying skin over which it passes. However, in literature, variations of branching patterns, size and course have been reported, thus may be needed further dissection studies.

Free SPBRA flap can be elevated from ipsilateral extremity under regional anesthesia, being a perfect alternative for repair of fingers tissue defects encountered in practice of hand surgery.

Key words: SPB, radial artery, flap.

