

REVERSE DORSAL METACARPAL ARTERY FLAP FOR RECONSTRUCTION OF GCT EXCISION DEFECT

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INTRODUCTION:

Dorsal skin of our finger is very thin, and covers the extensor apparatus. The reconstruction of the dorsum finger is challenging. The reverse dorsal metacarpal artery (RDMA) flap is a versatile option as is simple, reliable, and easy to harvest with minimal donor site morbidity

REPORT:

Case of 9 years old girl ,previously had ganglion cyst removed over right ring finger, presented to us recurrent swelling over ring finger for 4 months. The swelling was painless. No constitutional symptoms. On examination shows 1cm x1cm swelling over dorsal aspect of ring finger proximal interphalangeal joint(PIPJ) area. There was no neurovascular deficit distally; her range of motion (ROM) was full. Vascular examination of the affected hand is normal. MRI shows features of giant cell tumour involving sagittal band and extensor tendon of right ring finger. Patient was scheduled for excision of giant cell tumour and reverse dorsal metacarpal artery flap . The postoperative period was uneventful and patient discharged well. Subsequent follow up shows well healed wound

Figure 1 : Post op 4 months



DISCUSSION:

The reverse dorsal metacarpal artery flap was first described in literature by Maruyama and Quaba in 1990. The vascular basis of this flap is attributed to the supply by the dorsal metacarpal arterial system or the palmar arterial system through the crucial dorso-palmar anastomosis. Studies have also shown that as one proceeds to the ulnar intermetacarpal spaces (third and fourth spaces), the RDMA may be absent in 17-30% of cases; hence, it is mandatory to use Doppler to locate the presence of RDMA perforator system preoperatively. These flaps have some drawbacks. Since they are hair-bearing, they are not suitable for palmar finger defects

CONCLUSION:

The RDMA flap is easy to harvest with minimal donor site morbidity making it an excellent choice for the reconstruction of dorsal finger defects.

REFERENCES:

1. Leon Alexander, Dorsal Metacarpal Artery Flap: An Underrated Workhorse Flap for Reconstruction of Dorsal Finger Defect 2020