

BRACHIORADIALIS MUSCLE FLAP FOR POSTERIOR ELBOW DEFECT : A VIABLE OPTION IN A DISTRICT HOSPITAL SETTING

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Introduction: Posterior elbow defect remains a difficult issue to tackle even with our medical advancement. Many literatures have discussed multiple modes of addressing this issue including local fasciocutaneous flap, lateral arm flap, radial forearm flap, brachioradialis flap, flexor carpi ulnaris flap as well as latissimus flap with few highlighting the use of brachioradialis muscle flap. Brachioradialis muscle flap utilize a rotational muscular pedicled flap which was not extensively performed and proven to yield good outcome for large posterior elbow defects, especially in a district hospital setting. This is a successful case of a brachioradialis muscle flap used in closure of a large complicated posterior elbow defect in an open olecranon fracture.

Discussion: A 22-year-old Malay lady presented to us with an open comminuted right olecranon fracture following motor vehicle accident. She underwent two wound debridement followed by olecranon locking plate. Unfortunately, it was complicated with wound breakdown exposing the implant. Multiple attempts with fasciocutaneous flap were done however failed. Eventually, brachioradialis myocutaneous flap with split skin graft was done after discussing various options of wound closure with patient. On follow-up, the wound has successfully healed with good closure. Her elbow range of motion has greatly improved ranging from 5°-120°.

Conclusion: Posterior elbow is a common site for complications and wound breakdown. Brachioradialis muscle flap is a safe and viable option even in a hospital with no microsurgical expertise which is a single stage procedure that can be performed with low risk of morbidity even in cases with complicated fractures with large posterior defects.