

Thrill To Drill

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INTRODUCTION:

Surgical treatment of ipsilateral fractures on upper limb with arteriovenous fistula (AVF) in hemodialysis patients can yield good outcomes.¹ However, operating on these patients poses a significant challenge due to fear of pneumatic tourniquet application over the AVF, which may risk compromising the patency of the AVF.² We present a case of a patient with distal end radius peri-implant fracture with ipsilateral arm AVF who underwent surgery without using pneumatic tourniquet.

REPORT:

An 81 years old male, undergoing regular hemodialysis via AVF on his left arm, presented with closed left distal end radius peri-implant fracture following a fall at home. Patient was planned for removal of implant and plating of left distal end radius.

Incision of left forearm was done via modified Henry's approach. Instead of using pneumatic tourniquet, 20cc local infiltration of 1 in 10 000 adrenaline was given over the planned incision site, with local blanching of tissues seen.

Dissection was then done in layers under the bloodless field created, with uneventful removal of implant, open reduction and plating of osteoporotic fracture. Intra-operative estimated blood loss was 300mls, with adequate hemostasis achieved post-operatively.

During subsequent follow-up, patient's wound was noted to have healed well. Fistula over the left arm remained patent and functional, as evidenced by presence of thrills.



Figure 1:
Intraoperative pictures



Figure 2:
Post operative pictures

CONCLUSION:

In clinical situations where use of pneumatic tourniquet is contraindicated, local infiltration of adrenaline provides excellent haemostasis control. During subsequent dissection, meticulous attention to bleeders and early haemostatic control creates a bloodless surgical field, sufficient for open reduction and internal fixation of fractures.

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