



Minimally Invasive Direct-Vision Radial Artery Harvest Through a Single Short Incision: A Resource-Limited Setting Solution

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INTRODUCTION

Radial artery harvesting through a long open incision is associated with donor-site morbidity, while endoscopic harvesting requires specialized equipment and training. A minimally invasive direct-vision technique may reduce surgical trauma while maintaining conduit quality without additional disposable devices.

OUR EXPERIENCE

- 40 patients
- Single 3–4 cm forearm incision
- Direct vessel visualization
- Standard branch control
- Sequential proximal and distal mobilization with LigaSure
- Full-length radial artery retrieval
- No endoscopic devices required

RESULTS

Successful full-length harvest	100%
Mean harvest time	21 minutes
Donor-site complications	0
Hand ischemia	0
Intraoperative conduit injury	1
Early graft function	Satisfactory in all grafts
Arm function deficit	0

CONCLUSION

- Minimally invasive direct-vision radial artery harvesting is feasible and reproducible.
- The technique provides full-length conduit retrieval with low donor-site morbidity.
- **The technique combines the advantages of minimally invasive harvesting with the simplicity and accessibility of conventional instrumentation.**

