

ABSTRACT

Background Reconstruction of soft tissue defects of the hand and wrist with exposed tendons, joints, and neurovascular structures challenging for plastic surgeons. Such defects require a flap for coverage to preserve hand and wrist function. We used the distally based ulnar artery perforator flap for reconstruction in patients with soft tissue deformities and defects of the wrist and hand. **Methods** Between June 2015 and August 2017, 8 patients were operated upon to correct deformities of the hand and wrist using the distally based ulnar artery perforator flap. Their ages ranged from 1.5 to 32 years, and the male-to-female ratio was 1:1. Five of the patients had post-burn contractures, and the remaining were post-trauma, with 1 gunshot wound and the other 2 resulting from road traffic accidents. The flap was islanded in 3 patients and pedicled in 5. **Results** All of the flaps survived, and donor site defects in all patients were covered with split-thickness skin grafts. There was minimal donor site morbidity. **Conclusions** The distally based ulnar artery perforator flap is a convenient and reliable flap for reconstruction of soft tissue defects and postburn contractures of the hand and wrist. Its main advantages are that it is a single-stage procedure with no sacrificing of major vessels.

Keywords: ulnar artery, perforators, hand and wrist, Kenya