An easy technique of corrective osteotomy for distal radial deformities

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Distal radial malunion is being treated by traditional techniques with unpredictable results. Purpose is to report our experience of special technique of corrective osteotomy followed by fixation with locking volar plate to restore best possible anatomy. 34 patients with different types of malunion were operated during last two years. Preoperative evaluation required clinical, radiological or CT-scan assessment followed by preparation of preoperative template. Under C-arm control, open wedge osteotomy was performed by directing the oscillating saw under guidance of two K-wires passed parallel to the articulating surface through two different planes (sagittal and horizontal). Additionally, cortico-cancellous iliac bone graft was used and fixed with 2.7 mm titanium fixed angle locking volar plate. Post-operative results were evaluated by radiological and clinical parameters. This technique significantly improved radiological parameters. Radial height, Radial inclination and Volar tilt improved from 7.9 mm (SD ±2.4), 17.63º (SD±3.5), -1.42º (SD±7.50) to 10.33 mm (SD±1.7), 20.39º (SD±3.7) and 10.53º (SD ±10.53) respectively. Clinically there was eminent improvement in wrist and forearm function, finger movements and grip strength. Anatomical restitution is the hall mark of this surgery which can be achieved by correct way of osteotomy. Rigid peculiarities of volar plates provide the best fixation allowing early post-operative motion with credible outcome.

Biography
Khalid Masood obtained his MBBS from Nishtar Medical College Multan, Pakistan in 1988. He initially obtained his fellowship in General Surgery from College of Physicians and Surgeons Pakistan, followed by completion of training in Orthopedic Surgery from Armed forces Post Graduate Medical Institute, Rawalpindi in 2001. He completed his Fellowship in Hand surgery from UK in 2010. Since then, he is practicing exclusively in upper extremity and currently serving as head of department in hand and upper limb surgery centre, Lahore, Pakistan.

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