





patients (96.6%) were community ambulators. We did not see any significant screw tract infections or any loosening or failure of the hardware. The skin seems to tolerate the screws well and even seems to “adhere” to the screw. At the latest follow-up at an average of 15 months (range 8 - 22), all patients were fully weight bearing with a well formed callus.. All patients were free of infection with well-healed wounds.



**Figure 5:** open fracture of humerus, serial x rays at post op, 3 weeks, 6 weeks and 10 weeks

**Table 1:** Showing results

	No. of cases	Avg age of the patient	Avg duration of radiological union	Avg duration plate was kept
Femur fractures	8	34yrs	16 weeks	16 weeks
tibia	14	47yrs	19 weeks	20 weeks
humerus	7	42yrs	13 weeks	14 weeks
ulna	1	39yrs	11 weeks	11 weeks
total	30	41yrs		

#### 4. Discussion

LCP as an external device is superior and advantageous than other standard and circular external frames. LCP fixator can be concealed under clothing making it more acceptable to patients.



**Figure 6:** External appearance of implant after soft tissue wound healing.

There is much less tendency for the frame to strike the contra lateral lower leg in the swing-through phase of either leg during ambulation.



**Figure 7:** Patient walking with implant after radiological union

Hardware removal can be performed under local anaesthesia. It imparts a less conspicuous radiographic silhouette compared with traditional fixators allowing ease of assessment of healing of fracture to treating surgeons. Small amounts of axial micro-motion may reduce stress shielding of fracture site. Load sharing during weight bearing may stimulate the developing callus until bony union. Controlled dynamisation by removing screws closest to the fracture site is possible, allowing some measure of control to the load sharing process. Multiple distal locking holes in the pre contoured plate provide more stability compared to the standard two large external fixator pins[14]. Unlike the traditional fixation, mono-axial nature of locking head screw trajectory reduces the ability to compensate for imperfect placement, making it mandatory that anatomical reduction should be achieved prior to placement of first screw. While traditional constructs can be strengthened by stacking connecting rods, it is not possible for LCP external fixation. A Kloen’s strategy of double LCP fixation should be employed in such cases requiring enhanced stability [15].

#### 5. Conclusion

Obviously, our group of patients is relatively small and the indications limited. However, the consistent positive results using Locking compression plate as external fixator support our opinion such that we feel our described use of this plate is easy and very well tolerated by patients.

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## Author Profile



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