

Hi, remember me? I'm back!! Kuntscher nail- The Miri experience.

¹Harkiret S; ¹Izzuddin S; ¹Rashdeep S; ¹Faiz K, ¹Beatrix HYS, ¹Thirukumaran M

¹Department of Orthopaedics, Miri General Hospital, Jalan Cahaya, 98000, Miri, Sarawak, Malaysia.

INTRODUCTION:

Intramedullary nailing is used in femur shaft fractures as a load-sharing device thus superior biomechanically. Kuntscher nail (K Nail) is a 1st generation nail which was described by Gerhard Kuntscher, a German orthopaedist in 1940s. It is rigid and has a cloverleaf shape cross-section. However, with the development of interlocking which provided superior rotational stability, this once popular implant was outdated. In some hospitals with limited infrastructure or circumstances, K Nail has a role to play in Winquist type I and type II isthmic fractures¹.

REPORT:

Due to unforeseen circumstances, our image intensifier machine broke down and we had to resort K Nails for femur shaft fixation where it could be indicated. We had four patients who fitted the indicated K nail which was Winquist type I and type II isthmic fractures. The preoperative measurement for length and size was done. Patients were placed in a lateral position, open reduction was done and the sub vastus lateralis approach was used. Retrograde reaming was done up to the same size as the nail inserted via the Piriformis fossa. This procedure was done without the help of an image intensifier and traction table. The duration of the surgery was considerably shorter compared to interlocking nails and plating of a femur and also had no radiation exposure. A shorter duration of op also meant there was much lesser blood loss. The learning curve for a K nail was much less steep compared to an Interlocking nail. All four patients were fully weight-bearing at 2 weeks post-op and showed signs of clinical and radiological healing.

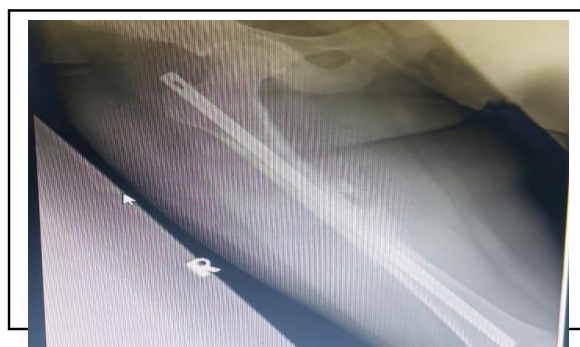


Figure 1: Pre-op Xray

Figure 2: Post-op 2 months Xray

CONCLUSION:

K Nail is a reliable method of fixation and a relatively easy procedure for Winquist I and II fractures. It also avoids unnecessary radiation exposure as well as saves OT time.

REFERENCES:

1. Bharti A, Kumar S, Kushwaha SS, Gupta AK Sr, Kumar N, Lal AK. Kuntscher Nail: A Forgotten Entity Yet a Reliable Modality in Treatment of Winquist Type I and II Closed Femoral Shaft Fractures. Cureus. 2020 Sep 23;12(9)