



Femoral Neck System Delivers Similar Revision and Mortality Rates as Traditional Fixation

In a study published in the *Journal of Bone and Joint Surgery*, Kaiser Permanente orthopedic surgeons and Medical Device Surveillance & Assessment researchers found that although the Femoral Neck System (FNS) offers a modern fixed-angle fixation construct and demonstrated biomechanical advantages in prior laboratory studies, this large real-world registry analysis found no clinical advantage over traditional cannulated screw fixation in patients aged 60 years and older.

“Innovative technology does not always translate into better patient outcomes. In this large registry study, the Femoral Neck System and traditional cannulated screws produced similar revision and mortality rates, reinforcing the role of evidence-based evaluation when introducing new orthopedic implants.” - Zachary O. Mallon, MD, Department of Orthopedic Surgery, Vacaville, CA

Study Details

- Included 2038 femoral neck fracture patients age >60, with FNS or 3 cannulated screw fixation during 2017 to 2022.
- No differences in 90-day emergency department visits or readmissions.
- No difference in all-cause revision risk between FNS and cannulated screw fixation within 2 years of surgery.
- Similar mortality rates at 2 years between the two fixation methods.
- Similar findings were observed when analyses were restricted to surgeons experienced with both fixation techniques.

Practice Considerations

While the FNS represents an innovative fixation technology, our findings do not support its routine use over cannulated screws in this patient population. Given the comparable revision and mortality rates, surgeons should weigh factors such as operative time and implant costs when selecting fixation methods for older patients with femoral neck fractures.

[Link to Published Manuscript](#)

Mallon ZO, Prentice HA, Schlauch AM, Fasig BH, Paxton EW, Sadeghi C, Okike K (2025). Femoral Neck System Compared with 3 Cannulated Screws in the Treatment of Femoral Neck Fractures in Patients Aged 60 and Older *J Bone Joint Surg Am*, 107-A (9): 958-967.

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