

Uncemented Distal fitting femur stem gives equivocal outcomes compared to cemented counterparts in elderly Dorr type B neck of femur fracture – propensity matched comparative study



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Introduction

□Elderly femur neck fractures (FNF) are becoming a major cause of patient morbidity and mortality, putting a strain on the global healthcare systems

Volume of THA has increased markedly over the past few decades, making it one of the most frequently performed orthopedic hip procedures globally for elderly (>65 years) FNFs
Femur morphology plays a vital role in selecting the technique of femur stem to be used

Aims & Objectives

To compare the postoperative outcomes and postoperative adverse events (POAEs) of three different THA techniques
Group 1 – Uncemented Primary Proximal metaphyseal-fitting
Stem THA group (UFP-THA) - type 1 single wedge stem
Group 2 – Uncemented Diaphyseal-fitting stem THA group (UFD-THA) - type 3B Tapered spline/ cone stem
Group 3 – Cemented THA group (CF-THA) - collarless polished

taper cemented femoral stem hybrid THA

Material & Method

□Retrospective Propensity matched comparative study □Institutional electronic medical records database was inquired for elderly patients aged 65 years and above, with Dorr type B femur morphology, who underwent Primary THA for Acute (≤ 1 week) displaced FNF from 1st January 2015 till 31st December 2021, with a minimum follow-up of 2-years

Result

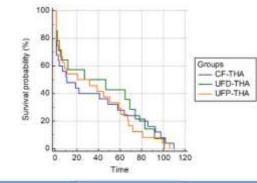
□ Mean follow up 5.82 years

47 POAEs were noticed (9:23:15; UFD-THA: UFP-THA: CF-THA)
No significant difference in mortality was noticed in the three groups from 1-week till the final follow-up



Discussion

□ The principal finding of this study is that UFD-THA gives equivocal PROMs in terms of OHS, EQ-5D, FJS-12, and POAEs as CF-THA in elderly patients with Dorr type B morphology. However, UFD- and CF-THA are statistically significantly superior to UFP-THA concerning POAEs.



Conclusion

□ Results of the UFD-THA group were comparable, to those of the CF-THA group; thereby, this study gives comprehensive perspectives to achieve shared decision-making about the use of UFD-THA as a preferred stem option in elderly FNF with Dorr type B femur cases, especially in patients with high risk for BCIS.