

Project Title	Spinal Medial Branch Nerve Root Block Intervention compared to Standard Care-Vertebroplasty for the Treatment of Painful Osteoporotic Vertebral Fractures in Hospitalised Older Patients: A Feasibility Study.
Reference Number	NIHR201937
Contracting Organisation	Nottingham University Hospitals NHS Trust
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Current Duration	18
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Contracted End Date	06/10/2022

Result Summary

A total of 271 potential participants were screened over the recruitment period from June 2021 to June 2022. Among those screened, 40 (10.8%) were deemed eligible to take part in the study. The most frequent reasons for exclusion were non severe pain on numeric rating scale (NRS) < 7 ($n=101$, 27.2%), more than 3 vertebral fractures ($n=99$, 26.7%) and patients who were discharged by the physiotherapist and qualified for conservative management only ($n=65$, 17.5%). Out of 40 eligible patients, 30 (75%) consented to take part in the study.

Fifteen (50%) participants were randomised to standard care vertebroplasty (VP) and 15 (50%) to nerve block (MBNB). Following randomisation, 3 participants were withdrawn from the study – one in the VP group (AVE 005 – needle phobia at the time of intervention) and two in the MBNB group (AVE 004 – not able to tolerate lying prone, AVE 008 – Covid positive on the day of procedure and withdrawn by the patient's supervising consultant). Therefore, 14 patients underwent BP and 13 MBNB.

The proportion of completeness of outcome data collection at weeks 1, 4 and 8 was at least 77%, 13 (100%), 12 (92.3%), 10 (76.8%) for MBNB and 14 (100%), 12 (85.7%), 11 (78.9%) for VP, respectively.

There were no significant difference in the clinical outcomes between standard care VP and MBNB, although Nottingham Extended Activities of Daily Living (NEADL) scale almost achieved statistical significance in favour of MBNB ($p=0.064$). Regression analysis of NEADL for age, procedure type, sex and time to procedure showed no relationship.