

QUESTIONING NICE – IS THERE A ROLE FOR FORAMINAL EPIDURAL INJECTIONS IN CENTRAL LUMBAR SPINAL CANAL STENOSIS?

Nick R Evans, Michael JH McCarthy

Welsh Centre for Spinal Surgery & Trauma, University Hospital of Wales, Cardiff, UK

INTRODUCTION

The non-operative options for the management of symptomatic central lumbar spinal canal stenosis, particularly in the elderly population, are limited.¹ Recent NICE guidelines do not support the role of epidural injections for the management of neurogenic claudication in patients with central spinal canal stenosis.² This study aims to see if there is a role for foraminal epidural steroid injections (FESIs) in this condition.

STUDY DESIGN

- A prospective, single surgeon case series of patients undergoing FESIs for symptomatic central lumbar spinal canal stenosis.

METHODOLOGY

- 115 patients had a FESI for lumbar spinal canal stenosis (September 2012 – September 2015).
- Patients under the age of 16 and with primarily disc related pathology were excluded.
- Pre-injection MRI scans were analysed and the degree of stenosis graded according to the classification by Schizas et al.³ based on dural sac morphology (Fig 1).
- The procedure was performed unilaterally at the worst affected level using a combination of local anaesthetic and steroid.
- Routine follow-up was performed 6 weeks post-injection.
- Response to treatment was assessed using patient-reported outcome measures (VAS back/leg pain, ODI and EQ-5D VAS) and the requirement for either a repeat injection or subsequent operation 2 years following the initial injection (September 2017).

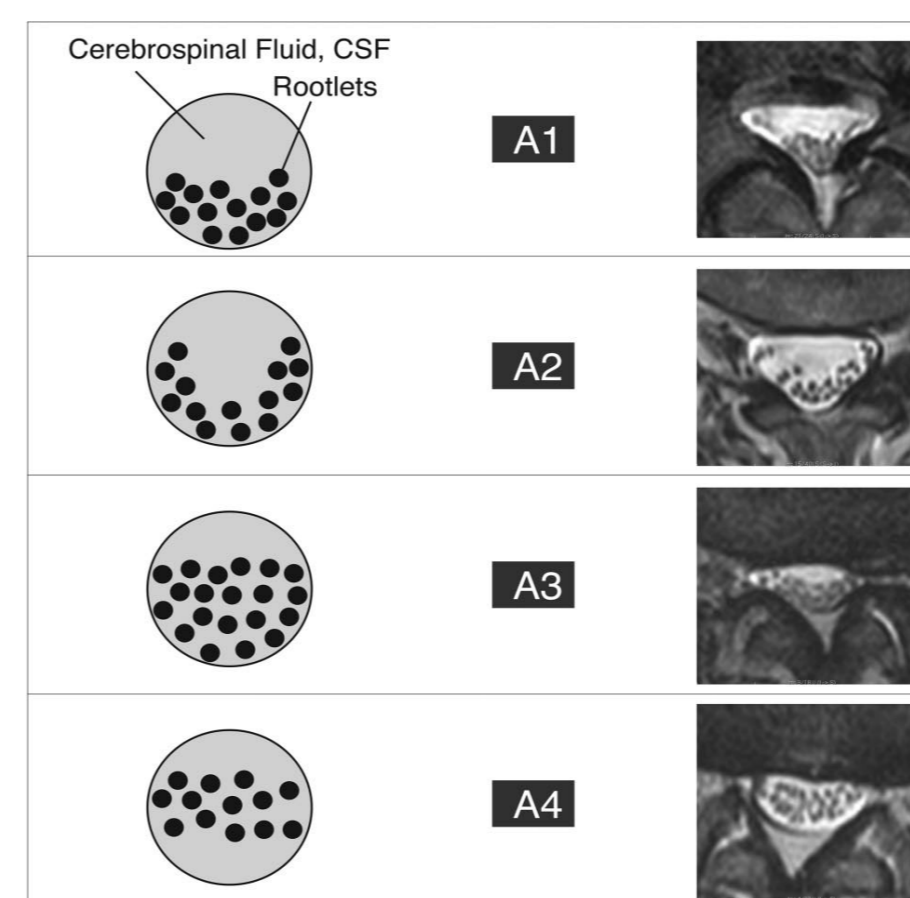
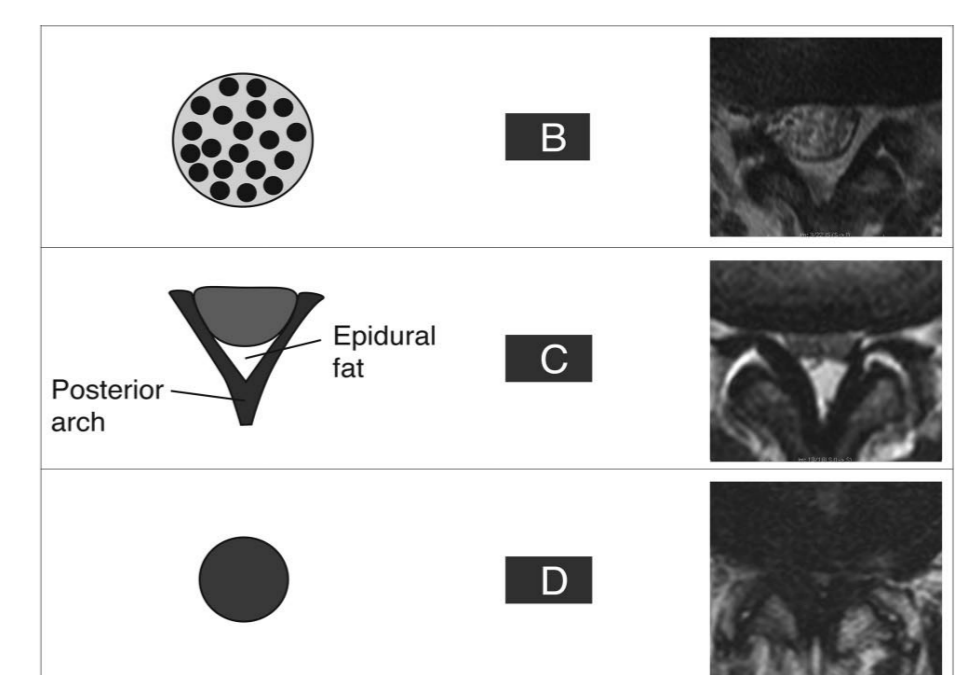


Fig 1. Diagrammatic and MRI demonstration of stenotic grading (taken from Schizas et al.³)



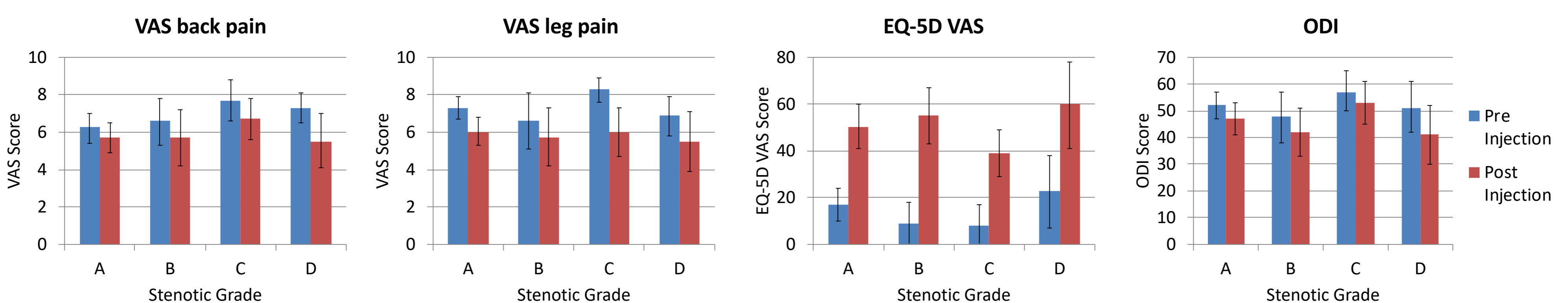
RESULTS

Demographics

Grade of Stenosis	A	B	C	D
No. of patients	53	20	21	21
Mean age (years)*	56	60	63	67
Gender**	60 males, 55 females			
Associated spondylolisthesis**	33 patients			
Rootogram (confirmed with image intensifier)	94% of patients			
Epidural spill (confirmed with image intensifier)	46% of patients			

* Correlation between stenotic grade and age (older = tighter) ** No correlation between stenotic grade and gender / associated spondylolisthesis

Patient-reported outcome measures



- Symptomatic improvement reported by 77% of patients
- Statistically significant improvement in VAS back pain, VAS leg pain, EQ-5D VAS and ODI post injection ($p < 0.001$) regardless of stenotic grade
- No significant difference between stenotic grades and patient-reported outcome measures

Requirement for repeat injection or subsequent surgery

- 31% had a repeat injection (no difference between stenotic grades and repeat injection)
- 30% had surgery post injection (no difference between stenotic grades and subsequent surgery)
- No association between epidural spill and repeat injection / subsequent surgery

CONCLUSIONS

- FESIs provide symptomatic relief for the majority of patients with central lumbar canal stenosis and can be considered in the management of patients with this condition.
- There was a non significant trend for those patients with Grade D stenosis (who were older) not to have subsequent surgery.
- Although no complications were reported, the authors would still advise caution when considering FESI in cases of severe stenosis.

REFERENCES

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