and meta-analysis<sup>3</sup> of nine articles (n=1109 patients) showed that the pooled rate of misdiagnosis of ruptured abdominal aortic aneurysms was 42% (range 13-68%) with no substantial improvement in published data since 1972. A study on factors delaying surgery in ruptured abdominal aortic aneurysms showed that patients with such ruptures presenting with low back pain were the most frequently misdiagnosed by general practitioners and non-vascular hospital doctors.4 The possibility of a ruptured abdominal aortic aneurysm should always be considered in the differential diagnosis of a new-onset low back pain, especially in men older than 50 years with a history of smoking.5

I declare no competing interests.

## Kosmas I Paraskevas paraskevask@hotmail.com

Department of Vascular Surgery, Royal Free Hospital, London, NW3 2QG, UK

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We read with interest the *Lancet* Series on low back pain<sup>1,2</sup> outlining the causes, consequences, and challenges associated with low back pain. However, the authors might have collectively missed a valuable opportunity to acknowledge the emerging link between chronic pain, accelerated cognitive decline, and dementia given that there are over 46 million people worldwide living with dementia at a cost of US\$818 billion, with the number of people projected to almost double

every 20 years.<sup>3</sup> Dementia is, after all, Britain's single biggest killer.

In support, the Health and Retirement Study investigated over 10 000 adults aged 62 years or older participants and identified that compared with pain-free controls those with chronic pain showed a more rapid decline in memory and increased probability of dementia that affected everyday living, including an inability to independently manage medications and finances.4 Separate observations that women are more prone to low back pain<sup>5</sup> and dementia, including faster progression of hippocampal atrophy in later life,6 further reinforce this potential link.

These findings are especially relevant for patients with low back pain given that current pharmacotherapy has the potential to cause central nervous system depression and further compromise cognition.4 Furthermore, the musculoskeletal degeneration and disability associated with low back pain predisposes patients to a more sedentary lifestyle, one of the primary risk factors for cognitive decline and dementia. Although the Series authors suggested promising and emerging solutions that could offer new directions,2 more emphasis needs to be placed on the integrated musculoskeletal-cardiovascular-neuroprotective benefits of physical activity. The notion that building a better back could also help build a better brain warrants consideration.

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## \*Damian M Bailey, David Byfield, Alister du Rose, Robin Corkill damian.bailey@southwales.ac.uk

Neurovascular Research Laboratory (DMB), Welsh Institute of Chiropractic, Faculty of Life Sciences and Education, University of South Wales, Glamorgan, Pontypridd, CF37 4AT, UK (DB, AdR); and Department of Neurology, University Hospital of Wales, Heath Park, Cardiff, UK (RC)

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The Lancet Series on low back pain¹ gives a comprehensive overview of strategies to prevent and treat low back pain. The treatment of low back pain remains challenging, as is the interpretation of the evidence. We would like to comment on two statements made by Nadine E Foster and colleagues.¹

First, the authors state that epidural injections are associated only with limited short-term pain reduction (<4 weeks). In table 2,1 epidural glucocorticoid injection for herniated disc with radiculopathy is not recommended for acute low back pain, and for persistent low back pain limited use in selected patients is recommended. This contrasts with the National Institute for Health and Care Excellence (NICE) guidelines, which specifically recommend this treatment for acute and severe sciatica.2 Moreover, there are 18 systematic reviews based on high-quality randomised controlled trials indicating an improvement in leg pain for up to 12 weeks.3

Second, the authors state that the recommendation to use radiofrequency denervation for chronic low back pain, as recommended by the NICE guidelines,<sup>2</sup> is challenged by the Mint trials. However, the Mint trials triggered several reactions pointing out the weaknesses of the patient recruitment, study design, standardisation of the technique, statistical analyses, and missing information.<sup>4,5</sup> Because of the identified flaws it is not justified that