LUMBAR SPINAL STENOSIS – A CASE PRESENTATION

ADAM DOBSON

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Age: 70 year old gentleman

Home life

- Lives in a house with his wife who supports him.
- \circ Retired
- Walks with a stick
- Non smoker, non drinker

Relevant history

- Two year ago he was enjoying walking for exercise, garden bowls and baby sitting his grandchildren.
- I8 months ago he was admitted to hospital with a serve exacerbation of Crohn's disease.
- Walking, climbing stairs and daily activities have since become more difficult.

FRANK



Medical history

- Crohn's disease
- Heart disease

Medications

- Statins
- Pregabalin
- PROM

Orebro: 52

Special Questions

- No rapid weight loss or fever
- No hx cancer

No symptoms suggestive of CES
 Other

No previous imaging

History of pain complaint

- 4/12 gradual low back, bilateral buttock and calf pain
- Concurrent sense of heaviness in his legs
- Occasional tingling in his calves, no reported sensory symptoms
- Denies balance problems but feels his fitness has deteriorated
- Leg cramps reported in bed.

Aggs

- Standing
- Walking appreciable distances

Eases

- Forward leaning
- \circ Sitting
- Bending his back



Observations

- He was slow to walk and used his arms to rise from his chair.
- He had good global movement although it elicited back pain into extension.

Neurology

- Normal power
- Normal, equal reflexes responses
- Below knee sensory exam normal
- Upper tract tests omitted

Vascular

• Posterior Tibial & Dorsalis Pedis palpable

Objective measures

- Grip strength: 20kgs
- \circ +ve 30 second extension test
- TUG test: 15 seconds



RADICULAR CLAUDICATION CLINICAL CLASSIFICATION CRITERIA



Genevay et al 2018

R CLASS SCORE

Attribute	Score
Age>60	4
Positive 30 second extension test	4
Patient reports pain in both legs	3
Patient reports pain relieved with sitting	3
Patient reports leg pain decreased by leaning forwards or flexing the spine	3
Negative straight leg raise	2

To calculate score simple add the total score of all 6 attributes (ranging from 0 to 19) 11> Highly likely to have RC associated with LSS (Specificity 92.1%, sensitivity 80.0%)

Genevay et al 2018

PLEDGE FOR GOOD COMMUNICATION ~ NERVE ROOT SENSITIVITY

Terms to describe relevant spinal aging	Terms to describe influence on nerve health	Adaptive language
Maturing spine naturally lead to narrowing tunnels.	Sensitive nerve roots	Desensitise
Tissues become a thicker and are 'likely' crowding out space around nerve roots.	Irritated nerve roots	Less irritation
Central and exiting tunnels are 'likely' a little tight.	Angry nerve roots	Happy nerves
Standing and walking narrows the tunnels.	Nerves a little less resilient	Increase resilience
Expected age changes	Strong things can be sore	Sore does not mean damaged

PLEDGE FOR GOOD COMMUNICATION ~ PROGNOSIS

- Symptoms wax and wane over time (flare and remit) but 60% of people improve or remain the same over long periods of time.
- Rarely associated with serious neurological decline

MANAGEMENT OVERVIEW



PLEDGE FOR HIGH QUALITY REHABILITATION

- Evidence for surgical decompression surgery (Zaina et al, 2016)
- Evidence for exercise therapy (Ammendolia et al, 2014).
- Guideline support ?

Howe et 2011, Lui et al 2009, Sherrington et al 2019

PLEDGE FOR THE MUSCLE ~ SARCOPENIA



Cruz-Jentoft et al 2019

EWGSOP2 CLASSIFICATION CRITERIA



Cruz-Jentoft et al 2019

OLDER PEOPLES DAY – COMBATING SARCOPENIA, FRAILTY AND FALLS

http://www.csp.org.uk/opd



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REFERENCE LIST

- Alfonzo Cruz-Jentoft et al Sarcopenia revised European Consensus on Definition and Diagnosis
 2019 Age and Ageing
- Chiung Lui and Nancy Latham 2009 Progressive resistance strength training for improving physical function in older adults Cochrane Database of systematic Reviews
- Tracey Howe, Lynn Rochester, Fiona Neil, Dawn A Skelton, Claire Ballinger (2011). Exercise for Improving balance in older people Cochrane Database of systematic Reviews
- Catherine Sherrington and Nicola Fairhall 2019 Exercise for preventing falls in older people living in the community Cochrane Database of systematic Reviews
- Christelle Nguyen, Isabelle Boutron, Alexandra Roren, Gabriel Baron 2019 Home-based cycling using connected ergometric bicycles for people with lumbar spinal stenosis (FLEXCAL): Protocol for a randomised trial. Annal of Physical and Rehabilitation Medicine.
- David Anderson, Manuela Ferreira, Ian Harris, Gavin Davis, Ralph Stanford, David Beard, Qiang Li, Stephen Jan, Ralph Mobbs, Christopher Maher, Renata Yong, Tara Zammit, Jane Latimer and Rachelle Buchbinder. 2018 The SUcceSS SUrgery for Spinal Stenosis: protocol of a randomised, placebo-controlled trial. BMJ Open.

REFERENCE LIST

- Stephanie Genevay and Steven Atlas 2010 Lumbar Spinal Stenosis. Best Practice and Research Clinical Rheumatology
- Stéphane Genevay; Delphine S Courvoisier; Kika Konstantinou; Francisco M Kovacs; Marc Marty; James Rainville; Michael Norberg; Jean-François Kaux; Thomas D Cha; Jeffrey N Katz and Steven J Atlas 2018 Clinical classification criteria for neurogenic claudication caused by lumbar spinal stenosis. The N-CLASS criteria. The spine Journal
- Y Ischimoto; N Yoshiumura; S Muraki; H Yamada; K Nagara; H Hashizume; N Takiguchi; A Minamide; H Kawaguchi; K Nakumarua; T Akune and M Yoshida 2012. Prevalence of symptomatic lumbar spinal stenosis and its association with physical performance in a population-based cohort in Japan: the Wakayama Spine Study. Osteoarthritis and Cartilage
- Fabio Zaina; Christy Tomkins-Lane; Eugene Carragee; Stefano Negrini 2016 Surgical versus non-surgical treatment for lumbar spinal stenosis Cochrane Database of Systematic reviews
- Carlo Ammendolia; Kent Stuber; Christy Tomkins-Lane; Michael Schneider, Y; Raja Rampersaud; Andrea D; Furlan & Carol A. Kennedy. 2014 What interventions improve walking ability in neurogenic claudication with lumbar spinal stenosis? A systematic review. European Spine Journal