

Case report 1: June 2013

Degenerative lumbosacral stenopathy - an interesting case

Welcome to the first edition of *NeuroNews* – an informal, but hopefully informative, newsletter covering a range of clinically relevant neurological topics, typically based on cases referred to *NeuroVet*.

Patient: 8yo FS German Shepherd, referred to *NeuroVet* in May 2013

Presenting problem: progressive faecal incontinence of five months' duration

Clinical findings: cardinal signs within normal limits; no firm evidence of spinal pain on deep palpation or lordosis, including tail-jack test

Neurological findings

Strongly ambulatory, but with a suspicion of paraparesis and HL ataxia on turning; proprioception deemed slightly reduced in the HL. Tail tone suspected to be slightly reduced. Urinary bladder not overly distended, but detrusor tone deemed poorer than normal. Sciatic-mediated reflexes considered to be mildly reduced; patellar reflexes normal to slightly exaggerated. Anal tone and anal reflex profoundly reduced. Perianal sensation seemed slightly reduced. There was moderate accumulation of faeces in the rectum.

Interpretation

The above findings are consistent with lumbosacral radiculomyelopathy with dysfunction of the L7 - S3 segments and/or associated roots. The suspected increase in intensity of the patellar reflexes would represent pseudohyperreflexia, secondary to paresis of the sciatic-innervated thigh flexor musculature.

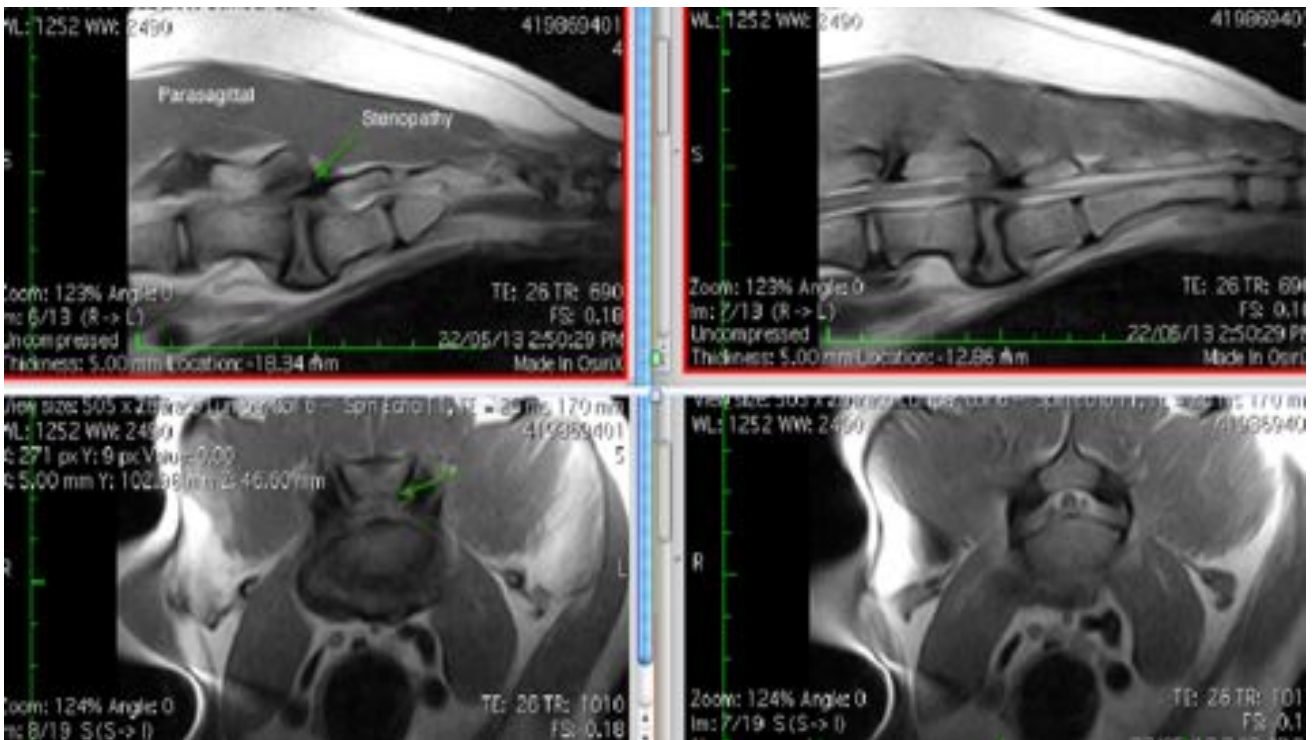
It is interesting that there was no history of urinary incontinence, however detrusor hypotonia may be a precursor to this. The lack of obvious spinal pain may reflect a chronic and slowly progressive syndrome.

Further investigation

Spinal radiographs revealed evidence of transitional anomaly of the sacrum, with secondary degenerative lumbosacral spondylopathy:



In-house MR imaging confirmed marked lumbosacral stenopathy:

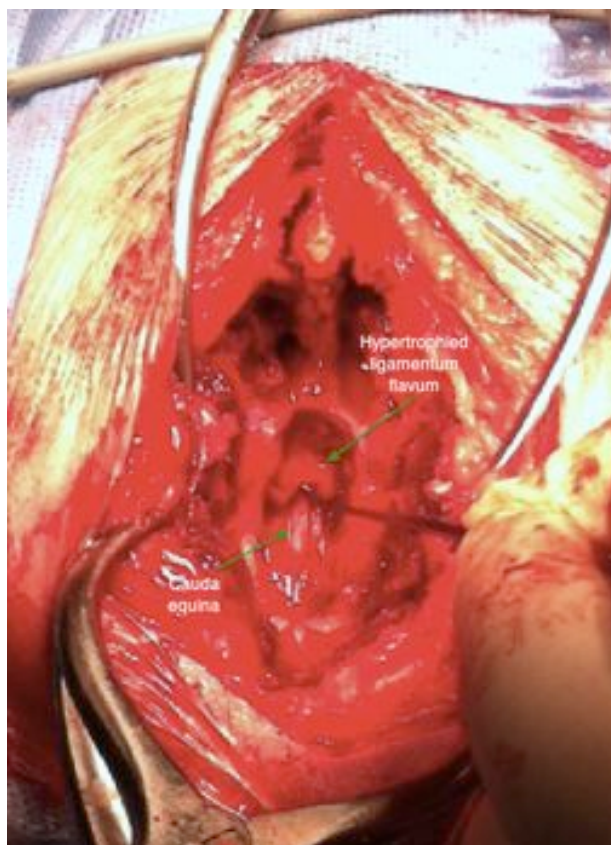


Management

In view of the above findings, surgical decompression was recommended. Given the duration and the severity of the deficits referable to the anus, a guarded prognosis was deemed appropriate with respect to resolution of the faecal incontinence. However, it was expected that decompression, in combination with appropriate post-operative management, would prevent progression of the currently mild paraparesis and hindlimb ataxia and development of clinical urinary incontinence.

Dorsal lumbosacral laminectomy confirmed anomalous thickening of the dorsal lamina of the cranial segment of the sacrum and marked hypertrophy/fibrosis of the ligamentum flavum, with secondary compression of the cauda equina at this level. Compressive tissue was resected utilising a combination of air-driven bur, curettage and sharp dissection. Following this procedure, normal epidural fat was visible at the cranial margin of the laminectomy.

There was no evidence of significant dorsal protrusion of the lumbosacral disc and so fenestration was not performed. As instability was not defined, the inter-facet joints could be preserved. Post-operative care includes short-course opiate analgesia and cage rest until suture removal.



FOOTNOTE

I would be delighted to receive suggestions on subjects to be covered in future editions.

Best wishes, Ian Douglas