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A comparison of partial ostectomy of the dorsal spinous processes in the horse; standing sedation versus general anaesthesia (28 cases).

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Introduction
To compare the post-operative outcome of horses that underwent partial ostectomy of the dorsal spinous processes (DSPs) under standing sedation and general anaesthesia. We hypothesised that post-operative morbidity rates would be lower in horses that underwent DSP resection under standing sedation, and that these horses would have an overall improved outcome compared with horses that had the procedure performed under general anaesthesia.

Materials and methods
Data were collected from clinical records of horses (n=28) that underwent surgical resection of impinging dorsal spinous processes (IDSPs). Univariable logistic regression and Chi-Square analysis were used to determine associations between surgical technique and outcome, height or number of resected DSPs and post-operative morbidity. Paired-t and Mann-Whitney U tests were used to compare the results from horses undergoing partial ostectomy under standing sedation (Group 1) and general anaesthesia (Group 2). Follow-up data was obtained via a telephone questionnaire with the owner. A positive outcome was defined as the horse returning to the same level of work or higher following surgery.

Results
Twenty-eight horses underwent surgical resection of the DSP summits of the thoracolumbar spine between 2004 and 2011. In both groups, as the number of DSP summits resected increased, the likelihood of the horse suffering a wound complication increased (P= 0.05), with the horse having approximately double the risk of suffering a wound complication with each additional DSP resected (OR 2.0, CI 1.0-4.0). Horses in Group 2 were at a significantly increased risk of suffering from wound discharge compared with those in Group 1 (P=0.05). Median time from surgery to discharge was 7.5 (2-20) days in Group 1 and 12 (5-46) days in Group 2. Surgery to discharge time was significantly longer in Group 2 compared with Group 1 (P=0.01). From Group 1, 10 horses (77%) had a positive outcome compared with 5 horses (45%) in Group 2.

Conclusions
Partial ostectomy of IDSPs in horses performed under standing sedation is associated with fewer complications, reduced post-operative morbidity and a better outcome compared to horses in which the procedure is performed under general anaesthesia.