**Table S1**: Median and range of pre- and postoperative plasma ACTH and serum cortisol concentrations in small dogs with pituitary-dependent hypercortisolism.

	Preoperative	Postoperative
Endogenous plasma ACTH (pg/mL) (n=15)	134.7	9.0
	(30.1 - 2132.0)	(0.1 - 238.0)
Endogenous serum cortisol (μg/dL) (n=34)	7.2	0.8
	(2.6 - 21.3)	(0.1 - 11.5)
Serum cortisol after ACTH (µg/dL) (n=34)	48.4	4.6
	(19.9 - 73.4)	(0.2 - 28.8)
Endogenous plasma ACTH in dogs with complete	98.4	8.9
pituitary resection (pg/mL) (n=10)	(.3 - 392.0)	(0.1 - 17.7)
Endogenous serum cortisol in dogs with complete	7.4	0.7
pituitary resection (μg/dL) (n=28)	(2.6 - 21.3)	(0.1 - 8.5)
Serum cortisol after ACTH in dogs with complete	50.0	3.6
pituitary resection (μg/dL) (n=28)	(19.9 - 73.4)	(0.4 - 9.7)
Endogenous plasma ACTH in dogs with partial	251	93.35
pituitary resection (pg/mL) (n=5)	(30.1 - 2132.0)	(7.4 - 238.0)
Endogenous serum cortisol in dogs with partial	8.3	5.1
pituitary resection (μg/dL) (n=6)	(2.9 - 11.2)	(0.1 - 11.5)
Serum cortisol after ACTH in dogs with partial	38.8	26.0
pituitary resection (μg/dL) (n=6)	(29.9 - 50.0)	(6.4 - 28.8)

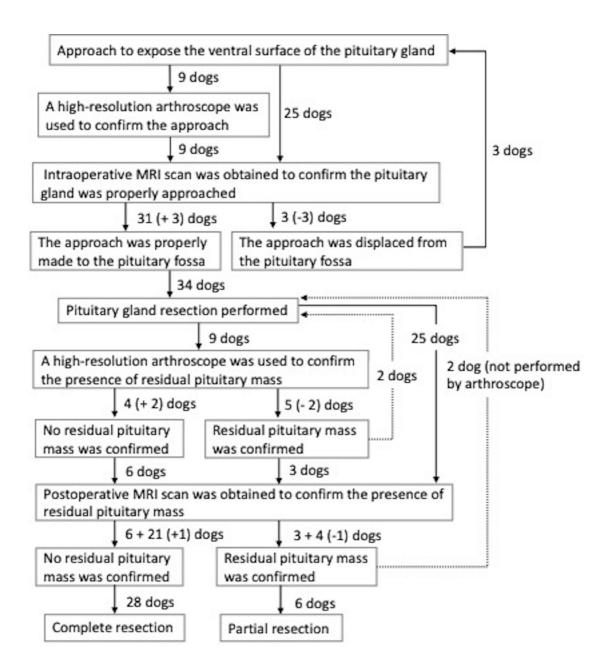


Figure S1. Flowchart showing the procedure on the day of the transsphenoidal surgery (TSS) performed in this study. Numbers in parentheses indicate the number of dogs that changed after being reapproached.

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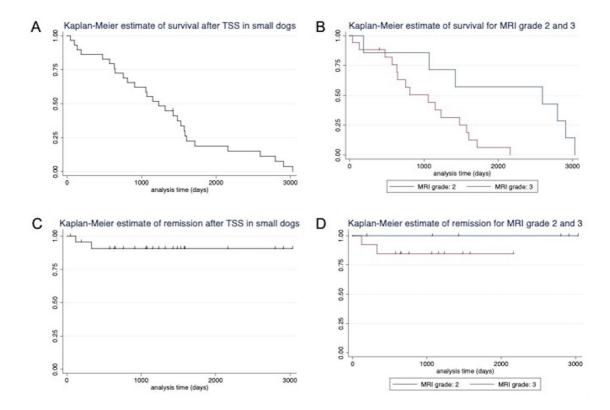


Figure S2. Estimated long-term survival and remission curves after transsphenoidal surgery (TSS) to remove the pituitary gland in small dogs with pituitary-dependent hypercortisolism.

A: Estimated long-term survival curves after transsphenoidal surgery in small dogs.

B: Comparison of estimated long-term survival in dogs with pituitary magnetic resonance imaging (MRI) grades 2 and 3.

A,B: The spike is a censored set, as the observation period was from after TSS to the present for the 1 dog that is still alive.

C: Estimated remission curves after transsphenoidal surgery in small dogs.

D: Estimated remission durations between dogs with pituitary MRI grades 2 or 3.

C,D: The spike is a censored set, as the observation period was from after TSS to the time of death for the dogs that died without recurrence within the survival period.

## **Supplemental references**

- S1. Oui H, Jeon S, Lee G, Park S, Cho KO, Choi J. Tissue Doppler and strain imaging of left ventricle in Beagle dogs with iatrogenic hypercortisolism. J Vet Sci 2015;16:357-365.
- S2. Takano H, Kokubu A, Sugimoto K, Sunahara H, Aoki T, Fijii Y. Left ventricular structural and functional abnormalities in dogs with hyperadrenocorticism. J Vet Cardiol 2015;17:173-181.
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