

Fig. E-1

**Figs. E-1A through E-1D** Classification system for neuromuscular junctions (arrows) in terms of acetylcholine esterase activity and morphology. **Fig. E-1A** Grade 1, normal shape and size. **Fig. E-1B** Grade 2, decrease in area, but normal shape and sufficient esterase activity. **Fig. E-1C** Grade 3, decrease in area and esterase activity, but the shape is retained. **Fig. E-1D** Grade 4, granular disorganization and decrease in the esterase activity without a clear shape.

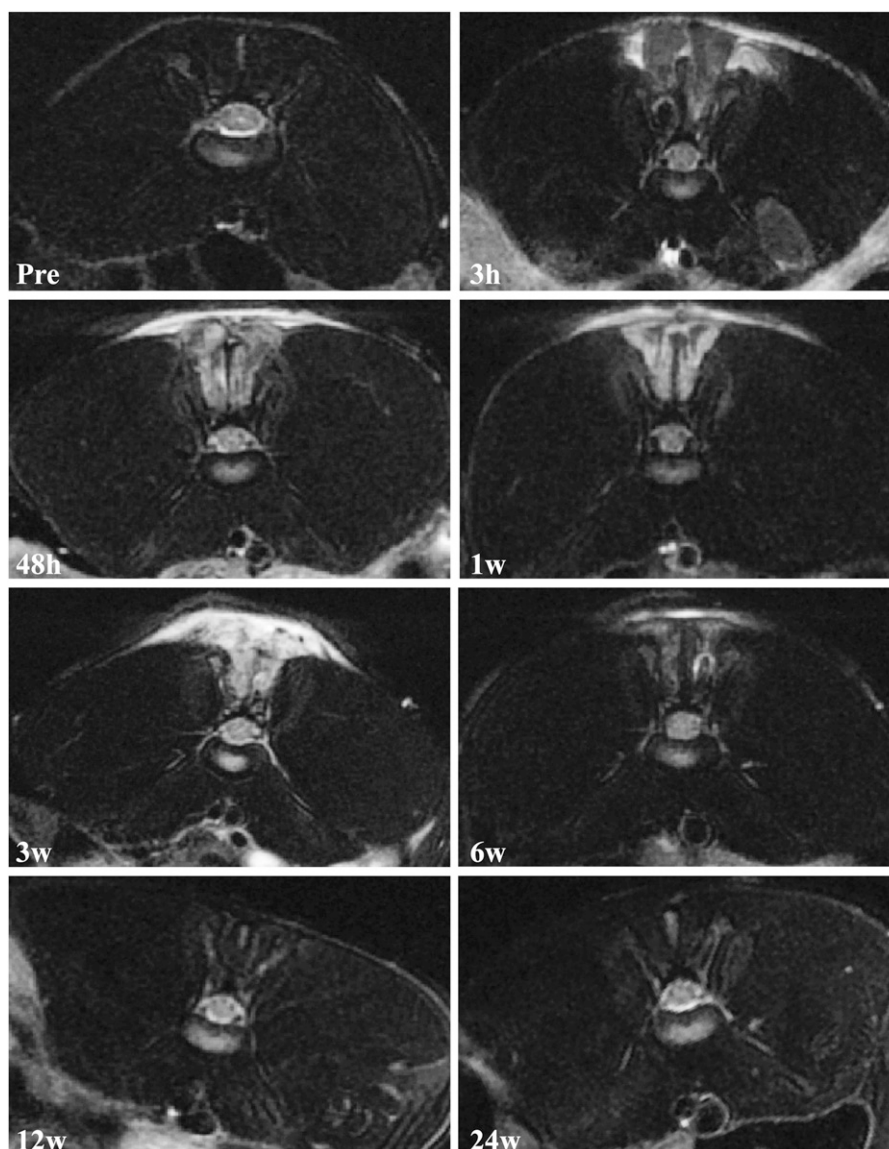


Fig. E-2

Serial changes on fat-suppressed T2-weighted cross-sectional MRI scans in group S. Pre = preoperative.

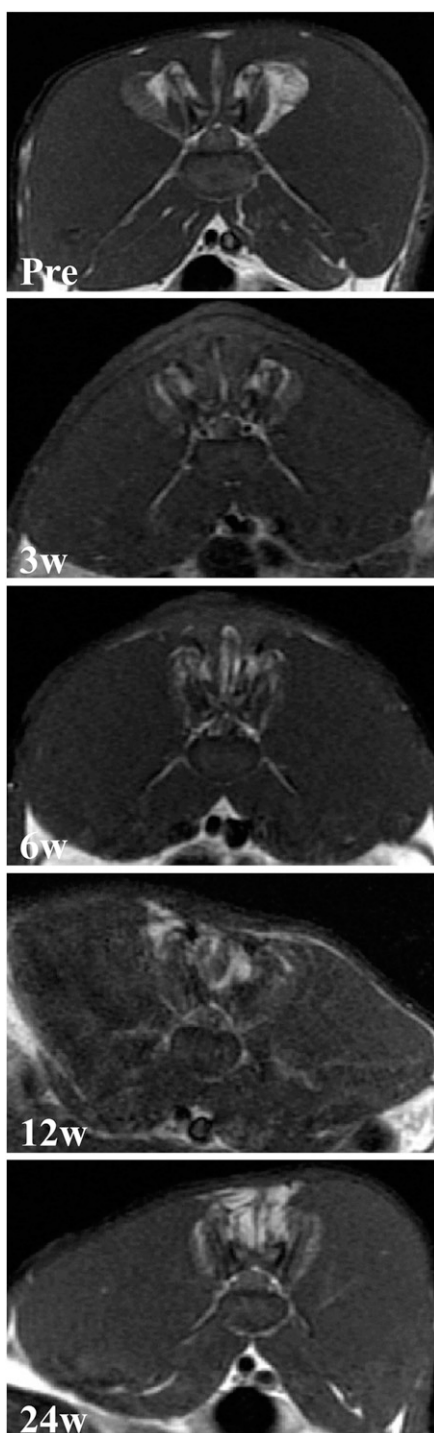


Fig. E-3

Serial changes on T1-weighted cross-sectional MRI scans in group S. Pre = preoperative.

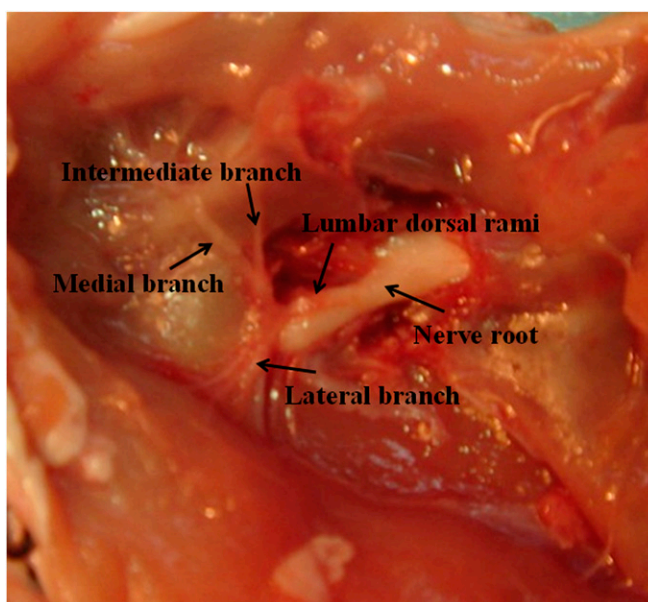


Fig. E-4

The course and distribution of innervated nerves of the sacrospinalis.

**TABLE E-1 Histological Grading Criteria for Muscle Injury Evaluation\***

Score	Edema (%)	Bleeding	Necrosis (%)	Inflammation
0	Normal tissue	Normal tissue	Normal tissue	Normal tissue
0-1	0-5	Minimal	0-5	Minimal
1-2	5-20	Mild	5-20	Mild
2-3	20-40	Moderate	20-40	Moderate
3-4	40-60	Severe	40-60	Severe
4-5	>60	Extremely severe	>60	Extremely severe

\*The percentage indicates the abnormal pathological area, accounting for the whole tissue section area.

**TABLE E-2 Grading Criteria for Muscle Atrophy According to Tissue Composition Proportion\***

Tissue Composition	Score				
	0-1	1-2	2-3	3-4	4-5
Fibrosis (%)	0-5	5-20	20-40	40-60	>60
Fatty degeneration (%)	0-5	5-20	20-40	40-60	>60

\*The percentage indicates the abnormal pathological area, accounting for the whole tissue section area.