Supplementary Material

Intensive Neurorehabilitation and allogeneic stem cells transplantation in canine degenerative myelopathy

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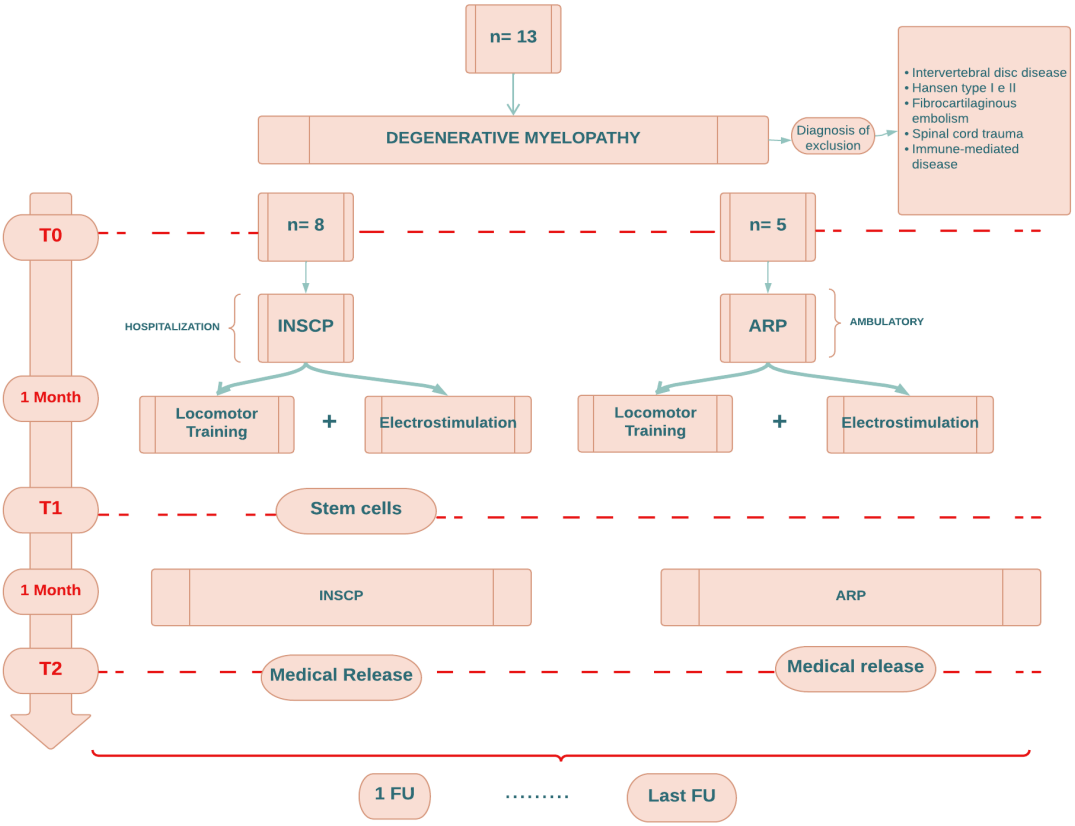
1 Supplementary Figures and Tables

1.1 Supplementary Figures

Supplementary Figure 1. Neurorehabilitation examination. A) Palpation of the spine. B) A dog presenting the cross-extensor reflex.



Supplementary Figure 2. Clinical study representative algorithm (n=13). INSCP: Intensive neurorehabilitation stem cell protocol; ARP: Ambulatory rehabilitation protocol; T0: admission day; T1: day 30; T2: day 60; FU: Follow-up.

1.2 Supplementary Tables

Supplementary table 1. Locomotor training protocol

	Land treadmill	Underwater treadmill
1st week	**Speed:** 0.9-1.2 km/h **Duration:** 10-20 min **Frequency:** 5 times/day, 6 days/week	**Speed:** 0.9-1.2 km/h **Duration:** 10 min **Frequency:** once/day, 5 days/week
2nd week	**Speed:** 1.2-2 km/h **Duration:** 20-30 min **Frequency:** 4 times/day, 6 days/week	**Speed:** 1.2-2 km/h **Duration:** 20 min **Frequency:** once/day, 5 days/week
3rd week	**Speed:** 2-2.8 km/h **Duration:** 30-40 min **Frequency:** 3 times/day, 6 days/week	**Speed:** 2-2.8 km/h **Duration:** 30 min **Frequency:** once/day, 5 days/week
4th week	**Speed:** 2.8-3.2 km/h **Duration:** 40-60 min **Frequency:** 2 times/day, 6 days/week	**Speed:** 2.8-3.2 km/h **Duration:** 60 min **Frequency:** once/day, 6 days/week

Supplementary table 2. Kinesiotherapy protocol

		Kinesiotherapy
INSCP	**1st week**	Walking in different surfaces 5 minutes; 3 times/day.
	2nd week	Walking in different surfaces; 5 minutes; 3 times/day *Cavaletti rail;* 5 minutes; 2 times/day
	3rd week	Walking in different surfaces; 10 minutes; 2 times/day *Cavaletti rail;*10 minutes; 2 times/day
	4th week	Walking in different surfaces;10 minutes; 1 time/day *Cavaletti rail;* 10 minutes; 1 time/day Up and down stairs/ramps; 5 minutes; 3 times/day

Legend: INSCP - Intensive neurorehabilitation with stem cells protocol

Supplementary table 3. Electrical stimulation protocol

		Week	Hz	mA	Times/day
Electrical Stimulation	**FES**	1st	40-60	10-36	4
		2nd			3
		3rd			2
		4th			1

Legend: FES – Functional electrical stimulation; Hz- Hertz; mA: milliamperes

Supplementary table 4. Ambulatory rehabilitation protocol

ARP								
Land Treadmill			**Under Water Treadmill**		**Kinesiotherapy**	**Electrical Stimulation (FES)**		
I	**F**	**T**	**I**	**T**	Walking in different surfaces; 10minutes; 2 times/day	**Hz**	**mA**	**F**
0,8-1,8	2	15-30	0,8-1,8	10-40	*Cavaletti rail*; 5minutes; 2 times/day	40-60	10-36	1 (4-5 times/week)

Legend: ARP – Ambulatory Rehabilitation Protocol; FES – Functional Electrical Stimulation; I – Intensity (km/h) ; F – frequency; T – time (minutes). Hz- Hertz; mA: milliamperes

Supplementary table 5. Descriptive analysis for age and weight

		Total (n=13)
Age	Mean	9.69
	Median	10
	Mode	10
	Variance	4.564
	SD	2.136
	Minimum	5
	Maximum	13
	SEM	0.593
	Shapiro-Wilk Normality Test	0.684
Weight	Mean	30.54
	Median	29
	Mode	27
	Variance	35.936
	SD	5.995
	Minimum	22
	Maximum	45
	SEM	1.663

	Shapiro-Wilk Normality Test	0.233

Legend: SD - standard deviation; SEM - Standard Error of Mean