

DAFTAR PUSTAKA

1. Kokotilo Jk, et al. reorganization and preservation of motor Control of the Brain in Spinal Cord Injury: A Systematic Review. *J Neurotrauma* 2009; 26(11): 2113-2126
2. Kirshblum SC, et al. *Spinal Corf Injury Medicine. 1. Etiology, Clasification, and Acute Medical Management. Arch Psys Med Rehabil Vol 83. 2002*
3. Genoveva and Kairunisa. *Diagnosis dan Tatalaksana Medula Spinalis. J Medula Unila vol 2. 2017*
4. Jaumard NV, et al. Relevant Anatomic and Morphological Measurements of the Rat Spine. *SpineJournal. 2015 p E1084-E1092*
5. Simon RP, Aminoff MJ, Greenberg DA. *Clinical Neurology Tenth Edition. Vol. 18, <https://Mesjidui.Ui.Ac.Id/Mukjizat-Al-Quran-Dan-As-Sunnah-Tentang-Pola-Makan-Sehat/>. 2018. 447 p.*
6. Louis E, Mayer S, Rowland L. *Merrit's Neurology. London: LWW; 2015.*
7. Swaiman K, Ashwal S, Ferrerio D, Schor N, Finkel R, Gropman A, et al. *Swaiman's Pediatric Neurology. 6th ed. London: Elsevier; 2017.*
8. Ropper AH, Samuels MA. *Adams and Vectors's Principles of Neurology Nine Edition. Mc Graw Hill Inc. New York. ISBN : 978-0-07-149992-7.*
9. Samuels MA, Ropper AH. *Samules 's Manual of Neurologic Therapeutics Nine Edition. Lippincot Williams & Wilkins. ISBN : 978-1- 60547-575-2.*
10. Barret K, Barman S, Brooks H, Yuan J. *Ganong's Review of Medical Physiology. London: McGraw Hill; 2019.*
11. Tortora G, Derrickson B. *Tortora's Anatomny and Physiology. London: Wiley; 2017.*
12. Brust JCM. *Current Diagnosis & Treatment in Neurology. Lange Medical Books / McGraw-Hill Medical Publishing Division. ISBN 13 :978-0-07-110554-5.*

13. Delen E, Sahin S, Aydin HE, Atkinci AT, Arsiantas A. Degenerative Spine Diseases Causing Cauda Equina Syndrome. *World Spinal Column Journal*.2015;6:3. 9. Liao L. Evaluation and Management of Neurogenic Bladder. *International Journal of Molecular Science*.2015;16. ISSN 1422-0067.doi: 10.3390/ijms160818580
14. Frangen, T.M.; Ruppert, S.; Muhr, G.; Schinkel, C. The beneficial effects of early stabilization of thoracic spine fractures depend on trauma severity. *J. Trauma* 2010, 68, 1208–1212. [CrossRef] [PubMed]
15. Mattiassich, G.; Gollwitzer, M.; Gaderer, F.; Blocher, M.; Osti, M.; Lill, M.; Ortmaier, R.; Haider, T.; Hitzl, W.; Resch, H.; et al. Functional Outcomes in Individuals Undergoing Very Early (<5h) and Early (5-24h) Surgical Decompression in Traumatic Cervical Spinal Cord Injury: Analysis of Neurological Improvement from the Austrian Spinal Cord Injury Study. *J. Neurotrauma* 2017, 34, 3362–3371. [PubMed] 79.
16. Ter Wengel, P.V.; De Witt Hamer, P.C.; Pauptit, J.C.; van der Gaag, N.A.; Oner, F.C.; Vandertop, W.P. Early Surgical Decompression Improves Neurological Outcome after Complete Traumatic Cervical Spinal Cord Injury: A Meta-Analysis. *J. Neurotrauma* 2018. [CrossRef] [PubMed]
17. Hernandez M, et al. Test repositioning for functional assessment of neurological outcome after experimental stroke in mice. *Plos-one*, May 2017.
18. Nagano K, Hori H, Muramatsu K. A comparison of at-home walking and 10-meter walking test parameters of individuals with post-stroke hemiparesis. *J Phys Ther Sci*. 2015 Feb; 27(2):357–9. <https://doi.org/10.1589/jpts.27.357> PMID: 25729167
19. Hernandez-Jime ´nez M, Hurtado O, Cuartero MI, Ballesteros I, Moraga A, Pradillo JM, et al. Silent information regulator 1 protects the brain against cerebral ischemic damage. *Stroke*. 2013 Aug; 44 (8):2333–7. <https://doi.org/10.1161/STROKEAHA.113.001715> PMID: 23723308

20. Zibly Z, et al. A Novel Rodent Model of Spinal Metastases and Spinal Cord Compression. *BMC Neurosci* 2012; p 137
21. Watters WC, et al. Diagnosis and treatment of degenerative lumbar spondylolisthesis. Evidence-based clinical guidelines for multidisciplinary spine care. North American Spine Society. Revised 2014
22. Brown Thomas G., Sherrington Charles S. The intrinsic factors in the act of progression in the mammal. *Proc. R. Soc. Lond. Ser. B Contain. Pap. Biol. Character.* 1911;84(572):308–319.
23. Taccola G. The locomotor central pattern generator of the rat spinal cord in vitro is optimally activated by noisy dorsal root waveforms. *J. Neurophysiol.* 2011;106(2):872–884.
24. Windhorst U. Muscle proprioceptive feedback and spinal networks. *Brain Res. Bull.* 2007;73(4):155-202.
25. Grillner S., Jessell T. M. Measured motion: searching for simplicity in spinal locomotor networks. *Curr. Opin. Neurobiol.* 2009;19:572–586.
26. Rivlin AS, Tator CH. Regional spinal cord blood flow in rats after severe cord trauma. *J Neurosurg.* 1978;49:844–53.
27. Ahuja CS, Martin AR, Fehlings M. Recent advances in managing a spinal cord injury secondary to trauma. *F1000Res.* 2016;5:F1000.
28. Couillard-Despres S, Vogl M. Pathophysiology of traumatic spinal cord injury. In: Rupp R, Weidner N., Tansey K. editors. *Neurological Aspects of Spinal Cord Injury.* Switzerland: Springer International Publishing. 2017.
29. Xu GY, Liu S, Hughes MG, McAdoo DJ. Glutamate-induced losses of oligodendrocytes and neurons and activation of caspase-3 in the rat spinal cord. *Neuroscience.* 2008;153:1034–47.
30. Beattie MS, Farooqui AA, Bresnahan JC. Review of current evidence for apoptosis after spinal cord injury. *J Neurotrauma.* 2000;17:915–25.

31. Williams P.R., Marincu B.N., Sorbara C.D., Mahler C.F., Schumacher A.M., Griesbeck O., Kerschensteiner M., Misgeld T. A recoverable state of axon injury persists for hours after spinal cord contusion in vivo. *Nat. Commun.* 2014;5:1–11.
32. Michael Fehlings AR, Boakye M, Rossignol S, Ditunno JF, Jr, Anthony S. *Burns Essentials of Spinal Cord Injury Basic Research to Clinical Practice.* Denver, CO: Thieme Medical Publishers Inc. 2013.
33. Brown PJ, Marino RJ, Herbison GJ, Ditunno JF, Jr. The 72-hour examination as a predictor of recovery in motor complete quadriplegia. *Arch Phys Med Rehabil.* 1991;72:546–8.
34. Lee J.H., Streijger F., Tigchelaar S., Maloon M., Liu J., Tetzlaff W., and Kwon B.K. A contusive model of unilateral cervical spinal cord injury using the infinite horizon impactor. *J. Vis. Exp.* 2012; 65: 3313.
35. Sandrow H.R., Shumsky J.S., Amin A., and Houle J.D. Aspiration of a cervical spinal contusion injury in preparation for delayed peripheral nerve grafting does not impair forelimb behavior or axon regeneration. *Exp. Neurol.* 2008;210:489–500
36. Salegio E.A., Bresnahan J.C., Sparrey C.J., Camisa W., Fischer J., Leasure J., Buckley J., Nout-Lomas Y., Rosenzweig E., Moseanko R., Strand S.C., Hawbecker S., Lemoy M., Ma X., Haefeli J., Nielson J.L., Edgerton V.R., Ferguson A.R., Tuszynski M.H., and Beattie M.S. A unilateral cervical spinal cord contusion injury model in nonhuman primates (*Macaca mulatta*). *J. Neurotrauma.* 2015.
37. Filippidis AS, Kalani MY, Theodore N, Rekte HL. Spinal cord traction, vascular compromise, hypoxia, and metabolic derangements in the pathophysiology of tethered cord syndrome. *Neurosurg Focus.* 2010; 29(1):E9.
38. American Association of Neurological Surgeons. *Spinal Cord Injury.* USA: AANS. 2022.

Lampiran 1. Hasil Analisis Data

Frequencies

		Statistics		
		FungsiMotori k24Jam	FungsiMotori k48Jam	FungsiMotori k72Jam
N	Valid	27	27	27
	Missing	0	0	0

Frequency Table

FungsiMotorik24Jam

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Tidak Paresis	8	29.6	29.6	29.6
	Paresis Unilateral	16	59.3	59.3	88.9
	Paraparesis	3	11.1	11.1	100.0
	Total	27	100.0	100.0	

FungsiMotorik48Jam

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Tidak Paresis	15	55.6	55.6	55.6
	Paresis Unilateral	9	33.3	33.3	88.9
	Paraparesis	3	11.1	11.1	100.0
	Total	27	100.0	100.0	

FungsiMotorik72Jam

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Tidak Paresis	18	66.7	66.7	66.7
	Paresis Unilateral	6	22.2	22.2	88.9
	Paraparesis	3	11.1	11.1	100.0
	Total	27	100.0	100.0	

CROSSTABS

/TABLES=DerajatTraksi BY FungsiMotorik24Jam FungsiMotorik48Jam

FungsiMotorik72Jam

/FORMAT=AVALUE TABLES

/STATISTICS=CHISQ

/CELLS=COUNT ROW
/COUNT ROUND CELL.

Crosstabs

Case Processing Summary

	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
DerajatTraksi * FungsiMotorik24Jam	27	100.0%	0	0.0%	27	100.0%
DerajatTraksi * FungsiMotorik48Jam	27	100.0%	0	0.0%	27	100.0%
DerajatTraksi * FungsiMotorik72Jam	27	100.0%	0	0.0%	27	100.0%

DerajatTraksi * FungsiMotorik24Jam

Crosstab

		FungsiMotorik24Jam			Total
		Tidak Paresis	Paresis Unilateral	Paraparesis	
DerajatTraksi 0,5 mm	Count	0	6	3	9
	% within DerajatTraksi	0.0%	66.7%	33.3%	100.0%
1 mm	Count	5	4	0	9
	% within DerajatTraksi	55.6%	44.4%	0.0%	100.0%

1,5 mm	Count	3	6	0	9
	% within DerajatTraksi	33.3%	66.7%	0.0%	100.0%
Total	Count	8	16	3	27
	% within DerajatTraksi	29.6%	59.3%	11.1%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11.250 ^a	4	.024
Likelihood Ratio	14.110	4	.007
Linear-by-Linear Association	5.162	1	.023
N of Valid Cases	27		

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is 1.00.

DerajatTraksi * FungsiMotorik48Jam

Crosstab

		FungsiMotorik48Jam			Total	
		Tidak Paresis	Paresis Unilateral	Paraparesis		
DerajatTraksi	0,5 mm	Count	0	6	3	9
		% within DerajatTraksi	0.0%	66.7%	33.3%	100.0%
	1 mm	Count	9	0	0	9

	% within DerajatTraksi	100.0%	0.0%	0.0%	100.0%
1,5 mm	Count	6	3	0	9
	% within DerajatTraksi	66.7%	33.3%	0.0%	100.0%
Total	Count	15	9	3	27
	% within DerajatTraksi	55.6%	33.3%	11.1%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	20.400 ^a	4	.000
Likelihood Ratio	27.677	4	.000
Linear-by-Linear Association	9.237	1	.002
N of Valid Cases	27		

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is 1.00.

DerajatTraksi * FungsiMotorik72Jam

Crosstab

		FungsiMotorik72Jam			Total
		Tidak Paresis	Paresis Unilateral	Paraparesis	
DerajatTraksi 0,5 mm	Count	0	6	3	9
	% within DerajatTraksi	0.0%	66.7%	33.3%	100.0%

1 mm	Count	9	0	0	9
	% within DerajatTraksi	100.0%	0.0%	0.0%	100.0%
1,5 mm	Count	9	0	0	9
	% within DerajatTraksi	100.0%	0.0%	0.0%	100.0%
Total	Count	18	6	3	27
	% within DerajatTraksi	66.7%	22.2%	11.1%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	27.000 ^a	4	.000
Likelihood Ratio	34.372	4	.000
Linear-by-Linear Association	16.421	1	.000
N of Valid Cases	27		

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is 1.00.