

Zentrum für Paraplegie (2018)

Originalarbeiten

1. Abt, Dominik; Hechelhammer, Lukas; Müllhaupt, Gautier; Markart, Stefan; Güsewell, Sabine; Kessler, Thomas M; Schmid, Hans-Peter; Engeler, Daniel S; Mordasini, Livio (2018). Comparison of prostatic artery embolisation (PAE) versus transurethral resection of the prostate (TURP) for benign prostatic hyperplasia: randomised, open label, non-inferiority trial. *BMJ : British medical journal*, 361:k2338.
2. Abt, Dominik; Müllhaupt, Gautier; Mordasini, Livio; Güsewell, Sabine; Markart, Stefan; Zumstein, Valentin; Kessler, Thomas M; Schmid, Hans-Peter; Engeler, Daniel S; Hechelhammer, Lukas (2018). Outcome Prediction of Prostatic Artery Embolization (PAE): Post hoc analysis of a randomized, open label, non-inferiority trial. *BJU International*:Epub ahead of print.
3. Anderson CE, Chamberlain JD, Jordan X, Kessler TM, Luca E, Möhr S, Pannek J, Schubert M, Brinkhof MW; SwiSCI Study Group (2018). Bladder emptying method is the primary determinant of urinary tract infections in patients with spinal cord injury: results from a prospective rehabilitation cohort study. *BJU International*, 123(2):342-352.
4. Baur, Kilian; Speth, Florina; Nagle, Aniket; Riener, Robert; Klamroth-Marganska, Verena (2018). Music meets robotics: a prospective randomized study on motivation during robot aided therapy. *Journal of Neuroengineering and Rehabilitation (JNER)*, 15:79.
5. Biering-Sørensen, Fin; Kennelly, Michael; Kessler, Thomas M; Linsenmeyer, Todd; Pannek, Jürgen; Vogel, Lawrence; Wyndaele, Jean-Jacques (2018). International spinal cord injury lower urinary tract function basic data set (version 2.0). *Spinal Cord Series and Cases*, 4:60.
6. Broicher, Sarah D; Filli, Linard; Geisseler, Olivia; Germann, Nicole; Zörner, Björn; Brugger, P; Linnebank, M (2018). Positive effects of fampridine on cognition, fatigue and depression in patients with multiple sclerosis over 2 years. *Journal of Neurology*, 265(5):1016-1025.
7. Buzzell, A; Chamberlain, J D; Gmünder, H P; Hug, K; Jordan, X; Schubert, M; Brinkhof, M W G; SwiSCI Study Group (2018). Survival after non-traumatic spinal cord injury: evidence from a population-based rehabilitation cohort in Switzerland. *Spinal Cord*:Epub ahead of print.
8. Bywater, Mirjam; Tornic, Jure; Mehnert, Ulrich; Kessler, Thomas M (2018). Detrusor acontractility after acute spinal cord injury: Myth or reality? *Journal of Urology*, 199(6):1565-1570.
9. Chamberlain, Jonviea D; Gmünder, Hans Peter; Hug, Kerstin; Jordan, Xavier; Moser, André; Schubert, Martin; Brinkhof, Martin W G (2018). Differential survival after traumatic spinal cord injury: evidence from a multi-center longitudinal cohort study in Switzerland. *Spinal Cord*, 56(10):920-930.
10. Christison, Kathleen; Walter, Matthias; Wyndaele, Jean-Jacques J M; Kennelly, Michael; Kessler, Thomas M; Noonan, Vanessa K; Fallah, Nader; Krassioukov, Andrei V (2018).

- Intermittent catheterization: The devil is in the details. *Journal of Neurotrauma*, 35(7):985-989.
11. Easthope, Christopher Schmidt; Traini, Luca Renato; Awai, Lea; Franz, Martina; Rauter, Georg; Curt, Armin; Bolliger, Marc (2018). Overground walking patterns after chronic incomplete spinal cord injury show distinct response patterns to unloading. *Journal of Neuroengineering and Rehabilitation (JNER)*, 15:102.
 12. Filli, Linard; Sutter, Tabea; Easthope, Christopher S; Killeen, Tim; Meyer, Christian; Reuter, Katja; Lörinicz, Lilla; Bolliger, Marc; Weller, Michael; Curt, Armin; Straumann, Dominik; Linnebank, Michael; Zörner, Björn (2018). Profiling walking dysfunction in multiple sclerosis: characterisation, classification and progression over time. *Scientific Reports*, 8:4984.
 13. Filli L, Werner J, Beyer G, Reuter K, Petersen JA, Weller M, Zörner B, Linnebank M. (2018). Predicting responsiveness to fampridine in gait-impaired patients with multiple sclerosis. *European Journal of Neurology (Eur J Neurol.)*, 26(2):281-289.
 14. Foditsch, Elena E; Roider, Karin; Sartori, Andrea M; Kessler, Thomas M; Kayastha, Sabik Raj; Aigner, Ludwig; Schneider, Marc P (2018). Cystometric and external urethral sphincter measurements in awake rats with implanted catheter and electrodes allowing for repeated measurements. *Journal of Visualized Experiments (Jove)*, 131:e56506.
 15. Freund, Patrick; Thompson, Alan; Curt, Armin; Hupp, Markus; Weiskopf, Nikolaus; Grabher, Patrick; Altmann, Daniel; Friston, Karl; Ashburner, John; Ziegler, Gabriel (2018). Author response: Progressive neurodegeneration following spinal cord injury: Implications for clinical trials. *Neurology*, 91(21):985.
 16. Gerig, Nicolas; Mayo, Johnathan; Baur, Kilian; Wittmann, Frieder; Riener, Robert; Wolf, Peter (2018). Missing depth cues in virtual reality limit performance and quality of three dimensional reaching movements. *PLoS ONE*, 13(1):e0189275.
 17. Herzog, Tanja; Swanenburg, Jaap; Hupp, Markus; Mittaz Hager, Anne-Gabrielle (2018). Effect of indoor wheelchair curling training on trunk control of person with chronic spinal cord injury: a randomised controlled trial. *Spinal Cord Series and Cases*, 4(1):1-6.
 18. Huber, Eveline; David, Gergely; Thompson, Alan J; Weiskopf, Nikolaus; Mohammadi, Siawoosh; Freund, Patrick (2018). Dorsal and ventral horn atrophy is associated with clinical outcome after spinal cord injury. *Neurology*, 90(17):e1510-e1522.
 19. Hupp, Markus; Pavese, Chiara; Bachmann, Lucas; Koller, Rene; Schubert, Martin (2018). Electrophysiological multimodal assessments improve outcome prediction in traumatic cervical spinal cord injury. *Journal of Neurotrauma*, 35(24):2916-2923.
 20. Jutzeler, Catherine R; Warner, Freda M; Cragg, Jacquelyn J; Haefeli, Jenny; Richards, J Scott; Andresen, Sven R; Finnerup, Nanna B; Mercier, Catherine; Kramer, John L (2018). Placebo response in neuropathic pain after spinal cord injury: a meta-analysis of individual participant data. *Journal of Pain Research*, 11:901-912.
 21. Kessler, Thomas M; Traini, Luca R; Welk, Blayne; Schneider, Marc P; Thavaseelan, Jeffrey; Curt, Armin (2018). Early neurological care of patients with spinal cord injury. *World Journal of Urology*, 36(10):1529-1536.
 22. Killeen, Tim; Elshehabi, Morad; Filli, Linard; Hobert, Markus A; Hansen, Clint; Rieger, David; Brockmann, Kathrin; Nussbaum, Susanne; Zörner, Björn; Bolliger, Marc; Curt, Armin; Berg, Daniela; Maetzler, Walter (2018). Arm swing asymmetry in overground walking. *Scientific Reports*, 8:12803.
 23. Klamroth-Marganska, Verena (2018). Stroke Rehabilitation: Therapy Robots and Assistive Devices. *Advances in Experimental Medicine and Biology*, 1065:579-587.

24. Knüpfer, Stephanie C; Liechti, Martina D; van der Lely, Stéphanie; Gregorini, Flavia; Schubert, Martin; De Wachter, Stefan; Kessler, Thomas M; Mehnert, Ulrich (2018). Sensory evoked cortical potentials of the lower urinary tract in healthy men. *Neurourology and Urodynamics*, 37(8):2614-2624.
25. Kozomara, Marko; Mehnert, Ulrich; Seifert, Burkhardt; Kessler, Thomas M (2018). Detrusor contraction during rapid bladder filling: Caused by cold or warm water? A randomized controlled double-blind trial. *Journal of Urology*, 199(1):223-228.
26. Kucher, Klaus; Johns, Donald; Maier, Doris; Abel, Rainer; Badke, Andreas; Baron, Hagen; Thietje, Roland; Casha, Steven; Meindl, Renate; Gomez-Mancilla, Baltazar; Pfister, Christian; Rupp, Rüdiger; Weidner, Norbert; Mir, Anis; Schwab, Martin E; Curt, Armin (2018). First-in-Man Intrathecal Application of Neurite Growth-Promoting Anti-Nogo-A Antibodies in Acute Spinal Cord Injury. *Neurorehabilitation and Neural Repair*, 32(6-7):578-589.
27. Malafeev, Alexander; Laptev, Dmitry; Bauer, Stefan; Omlin, Ximena; Wierzbicka, Aleksandra; Wichniak, Adam; Jernajczyk, Wojciech; Riener, Robert; Buhmann, Joachim; Achermann, Peter (2018). Automatic Human Sleep Stage Scoring Using Deep Neural Networks. *Frontiers in Neuroscience*, 12:781.
28. Müllhaupt, Gautier; Hechelhammer, Lukas; Engeler, Daniel S; Güsewell, Sabine; Betschart, Patrick; Zumstein, Valentin; Kessler, Thomas M; Schmid, Hans-Peter; Mordasini, Livio; Abt, Dominik (2018). In-hospital cost analysis of prostatic artery embolization compared to transurethral resection of the prostate: Post hoc analysis of a randomized controlled trial. *BJU International*:Epub ahead of print.
29. Pannek, Jürgen; Kennelly, Michael; Kessler, Thomas M; Linsenmeyer, Todd; Wyndaele, Jean-Jacques; Biering-Sørensen, Fin (2018). International spinal cord injury urodynamic basic data set (version 2.0). *Spinal Cord Series and Cases*, 4:98.
30. Popp, Werner L; Richner, Lea; Brogioli, Michael; Wilms, Britta; Spengler, Christina M; Curt, Armin E P; Starkey, Michelle L; Gassert, Roger (2018). Estimation of energy expenditure in wheelchair-bound spinal cord injured individuals using inertial measurement units. *Frontiers in Neurology*, 9:478.
31. Rinderknecht, Mike D; Ranzani, Raffaele; Popp, Werner L; Lamercy, Olivier; Gassert, Roger (2018). Algorithm for improving psychophysical threshold estimates by detecting sustained inattention in experiments using PEST. *Attention, Perception, & Psychophysics*, 80(6):1629-1645.
32. Rosner, J; Hostettler, P; Scheuren, P S; Sirucek, L; Rinert, J; Curt, A; Kramer, J L K; Jutzeler, C R; Hubli, M (2018). Normative data of contact heat evoked potentials from the lower extremities. *Scientific Reports*, 8(1):11003.
33. Rosner, J; Hubli, M; Hostettler, P; Scheuren, P S; Rinert, J; Kramer, J L K; Hupp, M; Curt, A; Jutzeler, C R (2018). Contact heat evoked potentials: Reliable acquisition from lower extremities. *Clinical Neurophysiology*, 129(3):584-591.
34. Rosner, J; Rinert, J; Ernst, M; Curt, A; Hubli, M (2018). Cold evoked potentials: Acquisition from cervical dermatomes. *Clinical Neurophysiology*, 49(1):49-57.
35. Scharfenberger, T M; Schrafl-Altermatt, M; Dietz, V (2018). Cooperative hand movements in tetraplegic spinal cord injury patients: Preserved neural coupling. *Clinical Neurophysiology*, 129(10):2059-2064.
36. Schrafl-Altermatt, Miriam; Easthope, Christopher S (2018). Cooperative hand movements: task-dependent modulation of ipsi- and contralateral cortical control. *Physiological Reports*, 6(10):e13581.

37. Schwab, Jan M; Maas, Andrew I R; Hsieh, Jane T C; Curt, Armin (2018). Raising awareness for spinal cord injury research. *Lancet Neurology*, 17(7):581-582.
38. Scivoletto, Giorgio; Pavese, Chiara; Bachmann, Lucas M; Schubert, Martin; Curt, Armin; Finazzi Agro, Enrico; Kessels, Alfons G; Kessler, Thomas M (2018). Prediction of bladder outcomes after ischemic spinal cord injury: A longitudinal cohort study from the European multicenter study about spinal cord injury. *Neurourology and Urodynamics*, 37(5):1779-1784.
39. Seif, Maryam; Curt, Armin; Thompson, Alan J; Grabher, Patrick; Weiskopf, Nikolaus; Freund, Patrick (2018). Quantitative MRI of rostral spinal cord and brain regions is predictive of functional recovery in acute spinal cord injury. *NeuroImage: Clinical*, 20:556-563.
40. Seif, Maryam; Ziegler, Gabriel; Freund, Patrick (2018). Progressive ventricles enlargement and CSF volume increases as a marker of neurodegeneration in SCI patients: A longitudinal MRI study. *Journal of Neurotrauma*, 35(24):2941-2946.
41. Steeves, John; Curt, Armin; Mehra, Munish; Rupp, Rüdiger; Blight, Andrew; Maier, Doris; Jones, Linda; Lammertse, Daniel; Abel, Rainer; Kirshblum, Steven; Weidner, Norbert (2018). The Spinal Cord Ability Ruler (SCAR) complements the Spinal Cord Independence Measure (SCIM). *Spinal Cord*, 56(5):525-526.
42. Thomas, F A; Dietz, V; Schrafl-Altarmatt, M (2018). Automatic gain control of neural coupling during cooperative hand movements. *Scientific Reports*, 8:5959.
43. Thomas, Felix A; Dietz, Volker; Scharfenberger, Thiemo; Schrafl-Altarmatt, Miriam (2018). Cooperative hand movements: effect of a reduced afference on the neural coupling mechanism. *NeuroReport*, 29(8):650-654.
44. Ujmajuridze, Aleksandre; Chanishvili, Nina; Goderdzishvili, Marina; Leitner, Lorenz; Mehnert, Ulrich; Chkhotua, Archil; Kessler, Thomas M; Sybesma, Wilbert (2018). Adapted Bacteriophages for Treating Urinary Tract Infections. *Frontiers in Microbiology*, 9:1832.
45. Vaganée, Donald; Kessler, Thomas M; Van de Borne, Sigrid; De Win, Gunter; de Wachter, Stefan (2018). Sacral neuromodulation: standardized tined lead implantation technique: two-year clinical outcome and sensory response upon lead stimulation comparing the use of the curved versus straight stylet. *BJU International*:Epub ahead of print.
46. Walter, Matthias; Christison, Kathleen; Wyndaele, Jean-Jacques J M; Kennelly, Michael; Kessler, Thomas M; Noonan, Vanessa K; Fallah, Nader; Krassioukov, Andrei V (2018). Response to Elliot and Crew (DOI: 10.1089/neu.2018.5697) Response to Christison et al. (DOI: 10.1089/neu.2017.5413): Intermittent Catheterization: The Devil Is in the Details. *Journal of Neurotrauma*:Epub ahead of print.
47. Walter, Matthias; Knüpfer, Stephanie C; Cragg, Jacquelyn J; Leitner, Lorenz; Schneider, Marc P; Mehnert, Ulrich; Krassioukov, Andrei V; Schubert, Martin; Curt, Armin; Kessler, Thomas M (2018). Prediction of autonomic dysreflexia during urodynamics: a prospective cohort study. *BMC Medicine*:16:53.
48. Warner, Freda; Cragg, Jacquelyn J; Jutzeler, Catherine; Finnerup, Nana; Werhagen, Lars; Weidner, Norbert; Maier, Doris; Kalke, Yorck-Bernhard; Curt, Armin; Kramer, John (2018). The progression of neuropathic pain after acute spinal cord injury: A meta-analysis and framework for clinical trials. *Journal of Neurotrauma*:Epub ahead of print.
49. Welk, Blayne; Schneider, Marc P; Thavaseelan, Jeffrey; Traini, Luca R; Curt, Armin; Kessler, Thomas M (2018). Early urological care of patients with spinal cord injury. *World Journal of Urology*, 36(10):1537-1544.
50. Wolf, Katharina; Hupp, Markus; Friedl, Susanne; Sutter, Reto; Klarhöfer, Markus; Grabher, Patrick; Freund, Patrick; Curt, Armin (2018). In cervical spondylotic myelopathy spinal cord

motion is focally increased at the level of stenosis: a controlled cross-sectional study. *Spinal Cord*, 56(8):769-776.

51. Wuertz-Kozak, Karin; Bleisch, Dominique; Nadi, Najia; Prömmel, Peter; Hitzl, Wolfgang; Kessler, Thomas M M; Gautschi, Oliver P; Hausmann, Oliver N (2018). Sexual and urinary function following anterior lumbar surgery in females. *Neurourology and Urodynamics*:Epub ahead of print.
52. Ziegler, Gabriel; Grabher, Patrick; Thompson, Alan; Altmann, Daniel; Hupp, Markus; Ashburner, John; Friston, Karl; Weiskopf, Nikolaus; Curt, Armin; Freund, Patrick (2018). Progressive neurodegeneration following spinal cord injury: Implications for clinical trials. *Neurology*, 90(14):e1257-e1266.

Reviews

1. Baur, Kilian; Schättin, Alexandra; de Bruin, Eling D; Riener, Robert; Duarte, Jaime E; Wolf, Peter (2018). Trends in robot-assisted and virtual reality-assisted neuromuscular therapy: a systematic review of health-related multiplayer games. *Journal of Neuroengineering and Rehabilitation (JNER)*, 15:107.
2. Bolliger, Marc; Blight, Andrew R; Field-Fote, Edelle C; Musselman, Kristin; Rossignol, Serge; Barthélemy, Dorothy; Bouyer, Laurent; Popovic, Milos R; Schwab, Jan M; Boninger, Michael L; Tansey, Keith E; Scivoletto, Giorgio; Kleitman, Naomi; Jones, Linda A T; Gagnon, Dany H; Nadeau, Sylvie; Haupt, Dirk; Awai, Lea; Easthope, Chris S; Zörner, Björn; Rupp, Ruediger; Lammertse, Dan; Curt, Armin; Steeves, John (2018). Lower extremity outcome measures: considerations for clinical trials in spinal cord injury. *Spinal Cord*, 56(7):628-642.
3. Finazzi-Agro, Enrico; Gammie, Andrew; Kessler, Thomas M; van Koeveringe, Gommert; Serati, Maurizio; Solomon, Eskinder; de Wachter, Stefan; Kirschner-Hermanns, Ruth (2018). Urodynamics Useless in Female Stress Urinary Incontinence? Time for Some Sense-A European Expert Consensus. *European Urology Focus*:Epub ahead of print.
4. Gassert, Roger; Dietz, Volker (2018). Rehabilitation robots for the treatment of sensorimotor deficits: a neurophysiological perspective. *Journal of Neuroengineering and Rehabilitation (JNER)*:15:46.
5. Hubli, Michèle; Bolt, Doris; Krassioukov, Andrei V (2018). Cold pressor test in spinal cord injury-revisited. *Spinal Cord*, 56(6):528-537.
6. Musco, Stefania; Padilla-Fernández, Barbara; Del Popolo, Giulio; Bonifazi, Matteo; Blok, Bertil F M; Groen, Jan; 't Hoen, Lisette; Pannek, Jürgen; Bonzon, Jerome; Kessler, Thomas M; Schneider, Marc P; Gross, Tobias; Karsenty, Gilles; Phé, Véronique; Hamid, Rizwan; Ecclestone, Hazel; Castro-Diaz, David (2018). Value of urodynamic findings in predicting upper urinary tract damage in neuro-urological patients: A systematic review. *Neurourology and Urodynamics*, 37(5):1522-1540.
7. Tornic, Jure; Sartori, Andrea M; Gajewski, Jerzy B; Cox, Ashley; Schneider, Marc P; Youssef, Nadim A; Mordasini, Livio; Chartier-Kastler, Emmanuel; Bachmann, Lucas M; Kessler, Thomas M (2018). Catheterization for treating neurogenic lower urinary tract dysfunction in patients with multiple sclerosis: A systematic review. A report from the Neuro-Urology Promotion Committee of the International Continence Society (ICS). *Neurourology and Urodynamics*, 37(8):2315-2322.
8. Tutolo, Manuela; Ammirati, Enrico; Heesakkers, John; Kessler, Thomas M; Peters, Kenneth M; Rashid, Tina; Sievert, Karl-Dietrich; Spinelli, Michele; Novara, Giacomo; Van der Aa, Frank;

- De Ridder, Dirk (2018). Efficacy and Safety of Sacral and Percutaneous Tibial Neuromodulation in Non-neurogenic Lower Urinary Tract Dysfunction and Chronic Pelvic Pain: A Systematic Review of the Literature. *European Urology*, 73(3):406-418.
9. Zumstein, Valentin; Betschart, Patrick; Vetterlein, Malte W; Kluth, Luis A; Hechelhammer, Lukas; Mordasini, Livio; Engeler, Daniel S; Kessler, Thomas M; Schmid, Hans-Peter; Abt, Dominik (2018). Prostatic Artery Embolization versus Standard Surgical Treatment for Lower Urinary Tract Symptoms Secondary to Benign Prostatic Hyperplasia: A Systematic Review and Meta-analysis. *European Urology Focus*:Epub ahead of print.

Online Artikel

1. Klamroth-Marganska V, Riener R. Zukunft der Neurorehabilitation. *Therapeutische Umschau*, 74(9):524-528.