

Traumatic Brain Injury

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Diffusion tensor imaging and white matter lesions at the subacute stage in mild traumatic brain injury with persistent neurobehavioral impairment.

<http://www.ncbi.nlm.nih.gov/pubmed/20669166>

Messé A, Caplain S, Paradot G, Garrigue D, Mineo JF, Soto Ares G, Ducreux D, Vignaud F, Rozec G, Desal H, Péligrini-Issac M, Montreuil M, Benali H, Lehericy S. Hum Brain Mapp. 2010 Jul 28. [Epub ahead of print]PMID: 20669166

Are functional deficits in concussed individuals consistent with white matter structural alterations: combined FMRI & DTI study.

<http://www.ncbi.nlm.nih.gov/pubmed/20496060>

Zhang K, Johnson B, Pennell D, Ray W, Sebastianelli W, Slobounov S. Exp Brain Res. 2010 Jul;204(1):57-70. Epub 2010 May 23.PMID: 20496060

Music therapy for acquired brain injury.

<http://www.ncbi.nlm.nih.gov/pubmed/20614449>

Bradt J, Magee WL, Dileo C, Wheeler BL, McGilloway E. Cochrane Database Syst Rev. 2010 Jul 7;7:CD006787. Review.

Brain-derived neurotrophic factor in traumatic brain injury, post-traumatic stress disorder, and their comorbid conditions: role in pathogenesis and treatment.

<http://www.ncbi.nlm.nih.gov/pubmed/20679891>

Kaplan GB, Vasterling JJ, Vedak PC. Behav Pharmacol. 2010 Jul 31. [Epub ahead of print]

Correlates of posttraumatic epilepsy 35 years following combat brain injury.

<http://www.ncbi.nlm.nih.gov/pubmed/20644150>

Raymont V, Salazar AM, Lipsky R, Goldman D, Tasick G, Grafman J. Neurology. 2010 Jul 20;75(3):224-9.

A preliminary model for posttraumatic brain injury depression.

<http://www.ncbi.nlm.nih.gov/pubmed/20599048>

Malec JF, Brown AW, Moessner AM, Stump TE, Monahan P. Arch Phys Med Rehabil. 2010 Jul;91(7):1087-97. Epub 2010 Jun 29.PMID: 20599048 [PubMed - indexed for MEDLINE]

Chronic traumatic encephalopathy.

<http://www.ncbi.nlm.nih.gov/pubmed/20659723>

Watanabe T, Elovic E, Zafonte R. PM R. 2010 Jul;2(7):671-5. No abstract available.PMID: 20659723

Assessment of impulsivity after moderate to severe traumatic brain injury.

<http://www.ncbi.nlm.nih.gov/pubmed/20635306>

Rochat L, Beni C, Billieux J, Azouvi P, Annoni JM, Van der Linden M. *Neuropsychol Rehabil.* 2010 Jul 6;1-20. [Epub ahead of print] PMID: 20635306

Prevalence, Assessment, and Treatment of Mild Traumatic Brain Injury and Posttraumatic Stress Disorder: A Systematic Review of the Evidence.

<http://www.ncbi.nlm.nih.gov/pubmed/20631631>

Carlson KF, Kehle SM, Meis LA, Greer N, Macdonald R, Rutks I, Sayer NA, Dobscha SK, Wilt TJ. *J Head Trauma Rehabil.* 2010 Jul 13. [Epub ahead of print] PMID: 20631631

Regionally Selective Atrophy After Traumatic Axonal Injury.

<http://www.ncbi.nlm.nih.gov/pubmed/20625067>

Warner MA, Youn TS, Davis T, Chandra A, Marquez de la Plata C, Moore C, Harper C, Madden CJ, Spence J, McColl R, Devous M, King RD, Diaz-Arrastia R. *Arch Neurol.* 2010 Jul 30. [Epub ahead of print]

A review of paroxysmal sympathetic hyperactivity after acquired brain injury.

Perkes I, Baguley IJ, Nott MT, Menon DK. *Ann Neurol.* 2010 Aug;68(2):126-35.

The history and evolution of traumatic brain injury rehabilitation in military service members and veterans.

Cifu DX, Cohen SI, Lew HL, Jaffee M, Sigford B. *Am J Phys Med Rehabil.* 2010 Aug;89(8):688-94.

Impact of the presence of alcohol at the time of injury on acute and one-year cognitive and functional recovery after traumatic brain injury.

Schutte C, Hanks R. *Int J Neurosci.* 2010 Aug;120(8):551-6.

Mild fluid percussion injury in mice produces evolving selective axonal pathology and cognitive deficits relevant to human brain injury.

Spain A, Daumas S, Lifshitz J, Rhodes J, Andrews PJ, Horsburgh K, Fowler JH. *J Neurotrauma.* 2010 Aug;27(8):1429-38.

Resting cerebral blood flow alterations in chronic traumatic brain injury: an arterial spin labeling perfusion fMRI study.

Kim J, Whyte J, Patel S, Avants B, Europa E, Wang J, Slattery J, Gee JC, Coslett HB, Detre JA. *J Neurotrauma.* 2010 Aug;27(8):1399-411.

Vasopressin amplifies the production of proinflammatory mediators in traumatic brain injury.

Szmydynger-Chodobska J, Fox LM, Lynch KM, Zink BJ, Chodobski A. *J Neurotrauma.* 2010 Aug;27(8):1449-61.

BCL2 Genotypes: Functional and Neurobehavioral Outcomes after Severe Traumatic Brain Injury.

Hoh NZ, Wagner AK, Alexander SA, Clark RB, Beers SR, Okonkwo DO, Ren D, Conley YP
J Neurotrauma. 2010 Aug;27(8):1413-27.

Post-concussion symptom reporting and the "good-old-days" bias following mild traumatic brain injury.

Lange RT, Iverson GL, Rose A. Arch Clin Neuropsychol. 2010 Aug;25(5):442-50.

Persistent symptoms in mild to moderate traumatic brain injury associated with executive dysfunction.

Hartikainen KM, Waljas M, Isoviita T, Dastidar P, Liimatainen S, Solbakk AK, Ogawa KH, Soimakallio S, Ylinen A, Ohman J. J Clin Exp Neuropsychol. 2010 Aug;32(7):767-74.

A meta-analytic review of the emotional symptoms associated with mild traumatic brain injury.

Panayiotou A, Jackson M, Crowe SF.

J Clin Exp Neuropsychol 2010;32:463-73.

Mild traumatic brain injury tissue texture analysis correlated to neuropsychological and DTI Findings.

Holli KK, Wäljas M, Harrison L, Liimatainen S, Luukkaala T, Ryymin P, Eskola H, Soimakallio S, Ohman J, Dastidar P.

Acad Radiol 2010 Jun 2,

Medscape. Blood-brain barrier breakdown as a therapeutic target in traumatic brain injury.

Shlosberg D, Benifla M, Kaufer D, Friedman A;

Nat Rev Neurol 2010 Jun 15,

Electroencephalogram in children with minor traumatic brain injury.

Oster I, Shamdeen GM, Gottschling S, Gortner L, Meyer S.

J Paediatr Child Health 2010 Jun 8,

Resting CBF alterations in chronic traumatic brain injury: An arterial spin labeling perfusion fMRI study.

Kim J, Whyte J, Patel S, Avants B, Europa E, Wang J, Slattery J, Gee JC, Coslett HB, Detre JA.

J Neurotrauma 2010 Jun 7,

The nature of processing speed deficits in traumatic brain injury: is less brain more?

Hillary FG, Genova HM, Medaglia JD, Fitzpatrick NM, Chiou KS, Wardecker BM, Franklin RG Jr, Wang J, DeLuca J.

Brain Imaging Behav 2010;4:141-54.

Tracking recovery of vestibular function in individuals with blast-induced head trauma using vestibular-visual-cognitive interaction tests.

Gottshall KR, Hoffer ME.

J Neurol Phys Ther 2010;34:94-7.

Effect of Growth Hormone Replacement Therapy on Cognition after Traumatic Brain Injury. High WM, Briones-Galang M, Clark JA, Gilkison C, Mossberg KA, Zgaljardic DJ, Masel BS, Urban RJ.

J Neurotrauma 2010 Jun 25,

Prognosis of six-month functioning after moderate to severe traumatic brain injury: a systematic review of prospective cohort studies. Husson EC, Ribbers GM, Willemsse-van Son AH, Verhagen AP, Stam HJ. J Rehabil Med 2010;42:425-36.

Quality of Life after Brain Injury (QOLIBRI) - Scale Development and Metric Properties. von Steinbuechel N, Wilson L, Gibbons H, Hawthorne G, Höfer S, Schmidt S, Bullinger M, Maas A, Neugebauer E, Powell J, von Wild K, Zitnay G, Bakx W, Christensen AL, Koskinen S, Sarajuuri J, Formisano R, Sasse N, Truelle JL. J Neurotrauma 2010 May 20. [Epub ahead of print]

Rates of major depressive disorder and clinical outcomes following traumatic brain injury. Bombardier CH, Fann JR, Temkin NR, Esselman PC, Barber J, Dikmen SS. JAMA 2010 May 19;303:1938-45.

Are functional deficits in concussed individuals consistent with white matter structural alterations: combined FMRI & DTI study. Zhang K, Johnson B, Pennell D, Ray W, Sebastianelli W, Slobounov S. Exp Brain Res. 2010 May 23. [Epub ahead of print]

Aetiological differences in neuroanatomy of the vegetative state: insights from diffusion tensor imaging and functional implications. Newcombe VF, Williams GB, Scoffings D, Cross J, Carpenter TA, Pickard JD, Menon DK. J Neurol Neurosurg Psychiatry 2010;81:552-61.

Neurological effects of blast injury. Hicks RR, Fertig SJ, Desrocher RE, Koroshetz WJ, Pancrazio JJ. J Trauma 2010;68:1257-63.

Sleep disturbance and melatonin levels following traumatic brain injury. Shekleton JA, Parcell DL, Redman JR, Phipps-Nelson J, Ponsford JL, Rajaratnam SM. Neurology 2010 25;74:1732-8.

Cerebrocerebellar hypometabolism associated with repetitive blast exposure mild traumatic brain injury in 12 Iraq war Veterans with persistent post-concussive symptoms. Peskind ER, Petrie EC, Cross DJ, Pagulayan K, McCraw K, Hoff D, Hart K, Yu CE, Raskind MA, Cook DG, Minoshima S. Neuroimage. 2010. [Epub ahead of print]

Morganti-Kossmann MC, Yan E, Bye N. Animal models of traumatic brain injury: Is there an optimal model to reproduce human brain injury in the laboratory? Injury 2010; Apr 21.

Newcombe VF, Williams GB, Scoffings D, Cross J, Carpenter TA, Pickard JD, Menon DK. Aetiological differences in neuroanatomy of the vegetative state: insights from diffusion tensor imaging and functional implications. J Neurol Neurosurg Psychiatry 2010; 81:552-61.

Evans RW. Persistent post-traumatic headache, postconcussion syndrome, and whiplash injuries: the evidence for a non-traumatic basis with an historical review. *Headache* 2010;50:716-24.

Bansal V, Costantini T, Ryu SY, Peterson C, Loomis W, Putnam J, Elicieri B, Baird A, Coimbra R. Stimulating the central nervous system to prevent intestinal dysfunction after traumatic brain injury. *J Trauma* 2010; 68:1059-64.

Katz-Leurer M, Rotem H, Keren O, Meyer S. The immediate effect of treadmill walking on step variability in boys with a history of severe traumatic brain injury and typically-developed controls. *Dev Neurorehabil* 2010; 13:170-4.

Rapoport MJ, Mitchell RA, McCullagh S, Herrmann N, Chan F, Kiss A, Feinstein A, Lanctôt KL. A randomized controlled trial of antidepressant continuation for major depression following traumatic brain injury. *J Clin Psychiatry* 2010; Apr 20.

Senathi-Raja D, Ponsford J, Schönberger M. Impact of age on long-term cognitive function after traumatic brain injury. *Neuropsychology* 2010; 24:336-44.

Kharatishvili I, Pitkänen A. Association of the severity of cortical damage with the occurrence of spontaneous seizures and hyperexcitability in an animal model of posttraumatic epilepsy. *Epilepsy Res* 2010; Apr 30.

Datta A, Bikson M, Fregni F. Transcranial direct current stimulation in patients with skull defects and skull plates: High-resolution computational FEM study of factors altering cortical current flow. *Neuroimage* 2010; May 6.

Maller JJ, Thomson RH, Lewis PM, Rose SE, Pannek K, Fitzgerald PB. Traumatic brain injury, major depression, and diffusion tensor imaging: Making connections. *Brain Res Rev* 2010 Apr 10. [Epub ahead of print]
<http://www.ncbi.nlm.nih.gov/pubmed/20388528?dopt=Abstract>

Hymel KP, Stoiko MA, Herman BE, Combs A, Harper NS, Lowen D, Deye KP, Homa K, Blackman JA. Head injury depth as an indicator of causes and mechanisms. *Pediatrics* 2010; 125: 712-20.
<http://pediatrics.aappublications.org/cgi/content/abstract/125/4/712>

Monti MM, Vanhaudenhuyse A, Coleman MR, Boly M, Pickard JD, Tshibanda L, Owen AM, Laureys S. Willful modulation of brain activity in disorders of consciousness. *N Engl J Med* 2010; 362: 579-89.
<http://content.nejm.org/cgi/content/full/NEJMoa0905370>

AR Mayer, J Ling, MV Mannell, C Gasparovic, JP Phillips, D Doezema, R Reichard, RA Yeo. A prospective diffusion tensor imaging study in mild traumatic brain injury. *Neurology* 2010; 74: 643 - 650.
<http://www.neurology.org/cgi/content/abstract/WNL.0b013e3181d0ccddv1>

Carlile M, Nicewander D, Yablon SA, Brown A, Brunner R, Burke D, Chae H, Englander J, Flanagan S, Hammond F, Khademi A, Lombard LA, Meythaler JM, Mysiw WJ, Zafonte R, Diaz-Arrastia R. Prophylaxis for venous thromboembolism during rehabilitation for traumatic brain injury: a multicenter observational study. *J Trauma* 2010; 68: 916-23.
http://journals.lww.com/jtrauma/Abstract/2010/04000/Prophylaxis_for_Venous_Thromboembolism_During.26.aspx

M Pardini, F Krueger, V Raymont, J Grafman.. Ventromedial prefrontal cortex modulates fatigue after penetrating traumatic brain injury. *Neurology* 2010; 74: 749 - 754.
<http://www.neurology.org/cgi/content/abstract/74/9/749>

Matthew J. Meyer, Joseph Megyesi, Jay Meythaler, Manuel Murie-Fernandez, Jo-Anne Aubut, Norine Foley, Katherine Salter, Mark Bayley, Shawn Marshall, Robert Teasell. Acute management of acquired brain injury part I: An evidence-based review of non-pharmacological interventions. *Brain Inj* 2010; 24: 694-705.
<http://informahealthcare.com/doi/abs/10.3109/02699051003692118>

Matthew J. Meyer, Joseph Megyesi, Jay Meythaler, Manuel Murie-Fernandez, Jo-Anne Aubut, Norine Foley, Katherine Salter, Mark Bayley, Shawn Marshall, Robert Teasell. Acute management of acquired brain injury part II: An evidence-based review of pharmacological interventions. *Brain Inj* 2010; 24: 706-721.
<http://informahealthcare.com/doi/abs/10.3109/02699051003692126>

Matthew J. Meyer, Joseph Megyesi, Jay Meythaler, Manuel Murie-Fernandez, Jo-Anne Aubut, Norine Foley, Katherine Salter, Mark Bayley, Shawn Marshall, Robert Teasell. Acute management of acquired brain injury Part III: An evidence-based review of interventions used to promote arousal from coma. *Brain Inj* 2010; 24: 722-729.
<http://informahealthcare.com/doi/abs/10.3109/02699051003692134>

Ruff RL, Ruff SS, Wang X-F: Improving sleep: Initial headache treatment in OIF/OEF veterans with blast-induced mild TBI. *J Rehab Res & Dev* 46(9):1071-1084, 2009.
www.rehab.research.va.gov/jour/09/46/9/absruff.html