

DAFTAR PUSTAKA

- Aaslid, R., Lindegaard, K. F., Sorteberg, W., & Nornes, H. (1989). Cerebral autoregulation dynamics in humans. *Stroke*, *20*(1), 45–52. <https://doi.org/10.1161/01.STR.20.1.45>
- Aaslid, R., Markwalder, T.-M., & Nornes, H. (1982). Noninvasive transcranial Doppler ultrasound recording of flow velocity in basal cerebral arteries. *Journal of Neurosurgery*, *57*(6), 769–774. <https://doi.org/10.3171/jns.1982.57.6.0769>
- Albanèse, J., Viviani, X., Potie, F., Rey, M., Alliez, B., & Martin, C. (1999). Sufentanil, fentanyl, and alfentanil in head trauma patients: a study on cerebral hemodynamics. *Critical Care Medicine*, *27*(2), 407–411.
- Andriessen, T. M. J. C., Jacobs, B., & Vos, P. E. (2010). Clinical characteristics and pathophysiological mechanisms of focal and diffuse traumatic brain injury. *Journal of Cellular and Molecular Medicine*, *14*(10), 2381–2392. <https://doi.org/10.1111/j.1582-4934.2010.01164.x>
- Armstead, W. M. (2016). Cerebral Blood Flow Autoregulation and Dysautoregulation. *Anesthesiology Clinics*, *34*(3), 465–477. <https://doi.org/10.1016/j.anclin.2016.04.002>
- Balestreri, M., Czosnyka, M., Hutchinson, P., Steiner, L. A., Hiler, M., Smielewski, P., & Pickard, J. D. (2006). Impact of intracranial pressure and cerebral perfusion pressure on severe disability and mortality after head injury. *Neurocritical Care*, *4*(1), 8–13. <https://doi.org/10.1385/Neurocrit. Care.2006;04:8-13>
- Bellner, J., Romner, B., Reinstrup, P., Kristiansson, K.-A., Ryding, E., & Brandt, L. (2004). Transcranial Doppler sonography pulsatility index (PI) reflects intracranial pressure (ICP). *Surgical Neurology*, *62*(1), 45–51. <https://doi.org/10.1016/j.surneu.2003.12.007>
- Blennow, K., Brody, D. L., Kochanek, P. M., Levin, H., McKee, A., Ribbers, G. M., Yaffe, K., & Zetterberg, H. (2016). Traumatic brain injuries. *Nature Reviews Disease Primers*, *2*. <https://doi.org/10.1038/nrdp.2016.84>
- Bor-Seng-Shu, E., Figueiredo, E. G., Amorim, R. L. O., Teixeira, M. J., Valbuza, J. S., de Oliveira, M. M., & Panerai, R. B. (2012a). Decompressive craniectomy: a meta-analysis of influences on intracranial pressure and cerebral perfusion pressure in the treatment of traumatic brain injury. *Journal of Neurosurgery*, *117*(3), 589–596. <https://doi.org/10.3171/2012.6.JNS101400>

- Bor-Seng-Shu, E., Figueiredo, E. G., Amorim, R. L. O., Teixeira, M. J., Valbuza, J. S., de Oliveira, M. M., & Panerai, R. B. (2012b). Decompressive craniectomy: a meta-analysis of influences on intracranial pressure and cerebral perfusion pressure in the treatment of traumatic brain injury. *Journal of Neurosurgery*, *117*(3), 589–596. <https://doi.org/10.3171/2012.6.JNS101400>
- Bor-Seng-Shu, E., Hirsch, R., Teixeira, M. J., de Andrade, A. F., & Marino, R. (2006). Cerebral hemodynamic changes gauged by transcranial Doppler ultrasonography in patients with posttraumatic brain swelling treated by surgical decompression. *Journal of Neurosurgery*, *104*(1), 93–100. <https://doi.org/10.3171/jns.2006.104.1.93>
- Bouma, G. J., Muizelaar, J. P., Bando, K., & Marmarou, A. (1992). Blood pressure and intracranial pressure-volume dynamics in severe head injury: relationship with cerebral blood flow. *Journal of Neurosurgery*, *77*(1), 15–19. <https://doi.org/10.3171/jns.1992.77.1.0015>
- Bouma, G. J., Muizelaar, J. P., Stringer, W. A., Choi, S. C., Fatouros, P., & Young, H. F. (1992). Ultra-early evaluation of regional cerebral blood flow in severely head-injured patients using xenon-enhanced computerized tomography. *Journal of Neurosurgery*, *77*(3), 360–368. <https://doi.org/10.3171/jns.1992.77.3.0360>
- Bramlett, H. M., & Dietrich, W. D. (2004). Pathophysiology of Cerebral Ischemia and Brain Trauma: Similarities and Differences. *Journal of Cerebral Blood Flow & Metabolism*, *24*(2), 133–150. <https://doi.org/10.1097/01.WCB.0000111614.19196.04>
- Brazinova, A., Rehorcikova, V., Taylor, M. S., Buckova, V., Majdan, M., Psota, M., Peeters, W., Feigin, V., Theadom, A., Holkovic, L., & Synnot, A. (2021). Epidemiology of Traumatic Brain Injury in Europe: A Living Systematic Review. *Journal of Neurotrauma*, *38*(10), 1411–1440. <https://doi.org/10.1089/neu.2015.4126>
- Carney, N., Totten, A. M., O'Reilly, C., Ullman, J. S., Hawryluk, G. W. J., Bell, M. J., Bratton, S. L., Chesnut, R., Harris, O. A., Kissoon, N., Rubiano, A. M., Shutter, L., Tasker, R. C., Vavilala, M. S., Wilberger, J., Wright, D. W., & Ghajar, J. (2016). Guidelines for the Management of Severe Traumatic Brain Injury, Fourth Edition. *Neurosurgery*. <https://doi.org/10.1227/NEU.0000000000001432>
- Cipolla, M. J. (2009). Control of Cerebral Blood Flow. In *The Cerebral Circulation*. Morgan & Claypool Life Sciences.
- Cooper, D. J., Rosenfeld, J. V., Murray, L., Arabi, Y. M., Davies, A. R., D'Urso, P., Kossmann, T., Ponsford, J., Seppelt, I., Reilly, P., & Wolfe, R. (2011a). Decompressive Craniectomy in Diffuse Traumatic Brain Injury. *New England*

Journal of Medicine, 364(16), 1493–1502.
<https://doi.org/10.1056/NEJMoa1102077>

Cooper, D. J., Rosenfeld, J. V., Murray, L., Arabi, Y. M., Davies, A. R., D'Urso, P., Kossmann, T., Ponsford, J., Seppelt, I., Reilly, P., & Wolfe, R. (2011b). Decompressive Craniectomy in Diffuse Traumatic Brain Injury. *New England Journal of Medicine*, 364(16), 1493–1502.
<https://doi.org/10.1056/NEJMoa1102077>

Coulson, R. J., Cipolla, M. J., Vitullo, L., & Chesler, N. C. (2004). Mechanical Properties of Rat Middle Cerebral Arteries With and Without Myogenic Tone. *Journal of Biomechanical Engineering*, 126(1), 76–81. <https://doi.org/10.1115/1.1645525>

Cunningham, A. S., Salvador, R., Coles, J. P., Chatfield, D. A., Bradley, P. G., Johnston, A. J., Steiner, L. A., Fryer, T. D., Aigbirhio, F. I., Smielewski, P., Williams, G. B., Carpenter, T. A., Gillard, J. H., Pickard, J. D., & Menon, D. K. (2005). Physiological thresholds for irreversible tissue damage in contusional regions following traumatic brain injury. *Brain*, 128(8), 1931–1942. <https://doi.org/10.1093/brain/awh536>

Czosnyka, M., Brady, K., Reinhard, M., Smielewski, P., & Steiner, L. A. (2009). Monitoring of Cerebrovascular Autoregulation: Facts, Myths, and Missing Links. *Neurocritical Care*, 10(3), 373–386. <https://doi.org/10.1007/s12028-008-9175-7>

Czosnyka, M., Smielewski, P., Kirkpatrick, P., Menon, D. K., & Pickard, J. D. (1996a). Monitoring of cerebral autoregulation in head-injured patients. *Stroke*, 27(10), 1829–1834. <https://doi.org/10.1161/01.STR.27.10.1829>

Czosnyka, M., Smielewski, P., Kirkpatrick, P., Menon, D. K., & Pickard, J. D. (1996b). Monitoring of cerebral autoregulation in head-injured patients. *Stroke*, 27(10), 1829–1834. <https://doi.org/10.1161/01.STR.27.10.1829>

Czosnyka, M., Smielewski, P., Piechnik, S., Steiner, L. a, & Pickard, J. D. (2001a). Cerebral autoregulation following head injury. *Journal of Neurosurgery*, 95(5), 756–763. <https://doi.org/10.3171/jns.2001.95.5.0756>

Czosnyka, M., Smielewski, P., Piechnik, S., Steiner, L. a, & Pickard, J. D. (2001b). Cerebral autoregulation following head injury. *Journal of Neurosurgery*, 95(5), 756–763. <https://doi.org/10.3171/jns.2001.95.5.0756>

De Riva, N., Budohoski, K. P., Smielewski, P., Kasprowicz, M., Zweifel, C., Steiner, L. A., Reinhard, M., Fábregas, N., Pickard, J. D., & Czosnyka, M. (2012). Transcranial doppler pulsatility index: What it is and what it isn't. *Neurocritical Care*, 17(1). <https://doi.org/10.1007/s12028-012-9672-6>

Dewan, M. C., Rattani, A., Gupta, S., Baticulon, R. E., Hung, Y. C., Punchak, M., Agrawal, A., Adeleye, A. O., Shrimel, M. G., Rubiano, A. M., Rosenfeld, J. V., &

- Park, K. B. (2019). Estimating the global incidence of traumatic brain injury. *Journal of Neurosurgery*. <https://doi.org/10.3171/2017.10.JNS17352>
- DeWitt, D. S., & Prough, D. S. (2003). Traumatic cerebral vascular injury: the effects of concussive brain injury on the cerebral vasculature. *Journal of Neurotrauma*, 20(9), 795–825. <https://doi.org/10.1089/089771503322385755>
- Donnelly, J., Aries, M. J., & Czosnyka, M. (2015). Further understanding of cerebral autoregulation at the bedside: possible implications for future therapy. *Expert Review of Neurotherapeutics*, 15(2), 169–185. <https://doi.org/10.1586/14737175.2015.996552>
- Donnelly, J., Budohoski, K. P., Smielewski, P., & Czosnyka, M. (2016). Regulation of the cerebral circulation: bedside assessment and clinical implications. *Critical Care*, 20(1), 129. <https://doi.org/10.1186/s13054-016-1293-6>
- Dorfer, C., Frick, A., Knosp, E., & Gruber, A. (2010). Decompressive hemicraniectomy after aneurysmal subarachnoid hemorrhage. *World Neurosurgery*, 74(4–5), 465–471. <https://doi.org/10.1016/j.wneu.2010.08.001>
- Drew, L. B., & Drew, W. E. (2004). The Contrecoup–Coup Phenomenon: A New Understanding of the Mechanism of Closed Head Injury. *Neurocritical Care*, 1(3), 385–390. <https://doi.org/10.1385/NCC:1:3:385>
- Duffin, J., Mikulis, D. J., & Fisher, J. A. (2021). Control of Cerebral Blood Flow by Blood Gases. *Frontiers in Physiology*, 12. <https://doi.org/10.3389/fphys.2021.640075>
- Enevoldsen, E. M., & Jensen, F. T. (1978). Autoregulation and CO₂ responses of cerebral blood flow in patients with acute severe head injury. *Journal of Neurosurgery*, 48(5), 689–703. <https://doi.org/10.3171/jns.1978.48.5.0689>
- Engelborghs, K., Haseldonckx, M., Van Reempts, J., Van Rossem, K., Wouters, L., Borgers, M., & Verlooy, J. (2000a). Impaired autoregulation of cerebral blood flow in an experimental model of traumatic brain injury. *Journal of Neurotrauma*, 17(8), 667–677. <https://doi.org/10.1089/089771500415418>
- Engelborghs, K., Haseldonckx, M., Van Reempts, J., Van Rossem, K., Wouters, L., Borgers, M., & Verlooy, J. (2000b). Impaired autoregulation of cerebral blood flow in an experimental model of traumatic brain injury. *Journal of Neurotrauma*, 17(8), 667–677. <https://doi.org/10.1089/089771500415418>
- Foundation, N. K. (2002). *Clinical Practice Guidelines For Chronic Kidney Disease: Evaluation, Classification and Stratification*.

- Gobiet, W., Grote, W., & Bock, W. J. (1975). The relation between intracranial pressure, mean arterial pressure and cerebral blood flow in patients with severe head injury. *Acta Neurochirurgica*, 32(1–2), 13–24. <https://doi.org/10.1007/BF01405899>
- Golding, E. M., Robertson, C. S., & Bryan, R. M. (1999a). The Consequences of Traumatic Brain Injury on Cerebral Blood Flow and Autoregulation: A Review. *Clinical and Experimental Hypertension*, 21(4), 299–332. <https://doi.org/10.3109/10641969909068668>
- Golding, E. M., Robertson, C. S., & Bryan, R. M. (1999b). The Consequences of Traumatic Brain Injury on Cerebral Blood Flow and Autoregulation: A Review. *Clinical and Experimental Hypertension*, 21(4), 299–332. <https://doi.org/10.3109/10641969909068668>
- Haddy, F. J., Vanhoutte, P. M., & Feletou, M. (2006). Role of potassium in regulating blood flow and blood pressure. *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*, 290(3), R546–R552. <https://doi.org/10.1152/ajpregu.00491.2005>
- Hlatky, R., Furuya, Y., Valadka, A. B., Gonzalez, J., Chacko, A., Mizutani, Y., Contant, C. F., & Robertson, C. S. (2002). Dynamic autoregulatory response after severe head injury. *J Neurosurg*, 97(5), 1054–1061.
- Hlatky, R., Valadka, A. B., & Robertson, C. S. (2005). Intracranial pressure response to induced hypertension: Role of dynamic pressure autoregulation. *Neurosurgery*, 57(5), 917–922. <https://doi.org/10.1227/01.NEU.0000180025.43747.fc>
- Hlatky, R., Valadka, A. B., & Robertson, C. S. (2006). Analysis of dynamic autoregulation assessed by the cuff deflation method. *Neurocritical Care*, 4(2), 127–132. <https://doi.org/10.1385/NCC:4:2:127>
- Hoiland, R. L., Bain, A. R., Rieger, M. G., Bailey, D. M., & Ainslie, P. N. (2016). Hypoxemia, oxygen content, and the regulation of cerebral blood flow. *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*, 310(5), R398–R413. <https://doi.org/10.1152/ajpregu.00270.2015>
- Hukkelhoven, C. W. P. M., Steyerberg, E. W., Habbema, J. D. F., Farace, E., Marmarou, A., Murray, G. D., Marshall, L. F., & Maas, A. I. R. (2005). Predicting Outcome after Traumatic Brain Injury: Development and Validation of a Prognostic Score Based on Admission Characteristics. *Journal of Neurotrauma*, 22(10), 1025–1039. <https://doi.org/10.1089/neu.2005.22.1025>
- Hutchinson, P. (2021). *Protocol 14PRT/6944: Randomised Evaluation of Surgery with Craniectomy for patients Undergoing Evacuation of Acute Subdural Haematoma*

(*RESCUE-ASDH*) - *ISRCTN87370545*. Elsevier.
<https://www.thelancet.com/protocol-reviews/14PRT-6944>

Hutchinson, P. J., Koliass, A. G., Timofeev, I. S., Corteen, E. A., Czosnyka, M., Timothy, J., Anderson, I., Bulters, D. O., Belli, A., Eynon, C. A., Wadley, J., Mendelow, A. D., Mitchell, P. M., Wilson, M. H., Critchley, G., Sahuquillo, J., Unterberg, A., Servadei, F., Teasdale, G. M., ... Kirkpatrick, P. J. (2016a). Trial of Decompressive Craniectomy for Traumatic Intracranial Hypertension. *New England Journal of Medicine*, 375(12), 1119–1130. <https://doi.org/10.1056/NEJMoa1605215>

Hutchinson, P. J., Koliass, A. G., Timofeev, I. S., Corteen, E. A., Czosnyka, M., Timothy, J., Anderson, I., Bulters, D. O., Belli, A., Eynon, C. A., Wadley, J., Mendelow, A. D., Mitchell, P. M., Wilson, M. H., Critchley, G., Sahuquillo, J., Unterberg, A., Servadei, F., Teasdale, G. M., ... Kirkpatrick, P. J. (2016b). Trial of Decompressive Craniectomy for Traumatic Intracranial Hypertension. *New England Journal of Medicine*, 375(12), 1119–1130. <https://doi.org/10.1056/NEJMoa1605215>

Hyder, A. A., Wunderlich, C. A., Puvanachandra, P., Gururaj, G., & Kobusingye, O. C. (2007). The impact of traumatic brain injuries: A global perspective. *NeuroRehabilitation*, 22(5), 341–353. <https://doi.org/http://iospress.metapress.com/content/103177/?sortorder=asc>

Inoue, Y., Shiozaki, T., Tasaki, O., Hayakata, T., Ikegawa, H., Yoshiya, K., Fujinaka, T., Tanaka, H., Shimazu, T., & Sugimoto, H. (2005). Changes in Cerebral Blood Flow from the Acute to the Chronic Phase of Severe Head Injury. *Journal of Neurotrauma*, 22(12), 1411–1418. <https://doi.org/10.1089/neu.2005.22.1411>

Jain, K. K. (2008). Neuroprotection in traumatic brain injury. In *Drug Discovery Today* (Vol. 13, Issues 23–24, pp. 1082–1089). <https://doi.org/10.1016/j.drudis.2008.09.006>

James, S. L., Theadom, A., Ellenbogen, R. G., Bannick, M. S., Montjoy-Venning, W., Lucchesi, L. R., Abbasi, N., Abdulkader, R., Abraha, H. N., Adsuar, J. C., Afarideh, M., Agrawal, S., Ahmadi, A., Ahmed, M. B., Aichour, A. N., Aichour, I., Aichour, M. T. E., Akinyemi, R. O., Akseer, N., ... Murray, C. J. L. (2019). Global, regional, and national burden of traumatic brain injury and spinal cord injury, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. *The Lancet Neurology*, 18(1), 56–87. [https://doi.org/10.1016/S1474-4422\(18\)30415-0](https://doi.org/10.1016/S1474-4422(18)30415-0)

Jones, P. A., Andrews, P. J., Midgley, S., Anderson, S. I., Piper, I. R., Tocher, J. L., Housley, A. M., Corrie, J. A., Slattery, J., & Dearden, N. M. (1994). Measuring the burden of secondary insults in head-injured patients during intensive care. *Journal of Neurosurgical Anesthesiology*, 6(1), 4–14. <https://doi.org/10.1097/00008506-199401000-00001>

- Junger, E. C., Newell, D. W., Grant, G. A., Avellino, A. M., Ghatan, S., Douville, C. M., Lam, A. M., Aaslid, R., & Winn, H. R. (1997). Cerebral autoregulation following minor head injury. *Journal of Neurosurgery*, *86*(3), 425–432. <https://doi.org/10.3171/jns.1997.86.3.0425>
- Kelly, D. F., Kordestani, R. K., Martin, N. A., Nguyen, T., Hovda, D. A., Bergsneider, M., McArthur, D. L., & Becker, D. P. (1996). Hyperemia following traumatic brain injury: relationship to intracranial hypertension and outcome. *Journal of Neurosurgery*, *85*(5), 762–771. <https://doi.org/10.3171/jns.1996.85.5.0762>
- Kelly, D. F., Martin, N. A., Kordestani, R., Counelis, G., Hovda, D. A., Bergsneider, M., McBride, D. Q., Shalmon, E., Herman, D., & Becker, D. P. (1997). Cerebral blood flow as a predictor of outcome following traumatic brain injury. *Journal of Neurosurgery*, *86*(4), 633–641. <https://doi.org/10.3171/jns.1997.86.4.0633>
- Kementerian Kesehatan RI. (2018). *Laporan Nasional RISKESDAS 2018*.
- Kinoshita, K. (2016). Traumatic brain injury: pathophysiology for neurocritical care. *Journal of Intensive Care*, *4*(1), 29. <https://doi.org/10.1186/s40560-016-0138-3>
- Knapp, J. M. (2005). Hyperosmolar therapy in the treatment of severe head injury in children: mannitol and hypertonic saline. *AACN Clin Issues*, *16*(2), 199–211. <https://doi.org/00044067-200504000-00011> [pii]
- Kolias, A. G., Adams, H., Timofeev, I., Czosnyka, M., Corteen, E. A., Pickard, J. D., Turner, C., Gregson, B. A., Kirkpatrick, P. J., Murray, G. D., Menon, D. K., & Hutchinson, P. J. (2016). Decompressive craniectomy following traumatic brain injury: developing the evidence base. *Br J Neurosurg*, *30*(2), 246–250. <https://doi.org/10.3109/02688697.2016.1159655>
- Kolias, A. G., Kirkpatrick, P. J., & Hutchinson, P. J. (2013a). Decompressive craniectomy: past, present and future. *Nat Rev Neurol*, *9*(7), 405–415. <https://doi.org/10.1038/nrneurol.2013.106>
- Kolias, A. G., Kirkpatrick, P. J., & Hutchinson, P. J. (2013b). Decompressive craniectomy: past, present and future. *Nat Rev Neurol*, *9*(7), 405–415. <https://doi.org/10.1038/nrneurol.2013.106>
- Lang, E. W., Lagopoulos, J., Griffith, J., Yip, K., Mudaliar, Y., Mehdorn, H. M., & Dorsch, N. W. C. (2003). Noninvasive Cerebrovascular Autoregulation Assessment in Traumatic Brain Injury: Validation and Utility. *Journal of Neurotrauma*, *20*(1), 69–75. <https://doi.org/10.1089/08977150360517191>
- Langfitt, T. W., Obrist, W. D., Gennarelli, T. A., O’connor, M. J., & Ter Weeme, C. A. (1977). Correlation of Cerebral Blood Flow with Outcome in Head Injured Patients.

Annals of Surgery, 186(4), 411–414. <https://doi.org/10.1097/00000658-197710000-00002>

Lewelt, W., Jenkins, L. W., & Miller, J. D. (1980). Autoregulation of cerebral blood flow after experimental fluid percussion injury of the brain. *Journal of Neurosurgery*, 53(4), 500–511. <https://doi.org/10.3171/jns.1980.53.4.0500>

Li, L. M., Koliass, A. G., Guilfoyle, M. R., Timofeev, I., Corteen, E. A., Pickard, J. D., Menon, D. K., Kirkpatrick, P. J., & Hutchinson, P. J. (2012). Outcome following evacuation of acute subdural haematomas: A comparison of craniotomy with decompressive craniectomy. *Acta Neurochirurgica*, 154(9), 1555–1561. <https://doi.org/10.1007/s00701-012-1428-8>

Lingsma, H. F., Roozenbeek, B., Steyerberg, E. W., Murray, G. D., & Maas, A. I. (2010). Early prognosis in traumatic brain injury: from prophecies to predictions. *The Lancet Neurology*, 9(5), 543–554. [https://doi.org/10.1016/S1474-4422\(10\)70065-X](https://doi.org/10.1016/S1474-4422(10)70065-X)

Ma, L., Liu, W. guo, Sheng, H. song, Fan, J., Hu, W. wei, & Chen, J. seng. (2010). Decompressive Craniectomy in Addition to Hematoma Evacuation Improves Mortality of Patients with Spontaneous Basal Ganglia Hemorrhage. *Journal of Stroke and Cerebrovascular Diseases*, 19(4), 294–298. <https://doi.org/10.1016/j.jstrokecerebrovasdis.2009.07.002>

Maas, A. I. R., Stocchetti, N., & Bullock, R. (2008). Moderate and severe traumatic brain injury in adults. *Lancet Neurology*, 7(8), 728–741. [https://doi.org/10.1016/S1474-4422\(08\)70164-9](https://doi.org/10.1016/S1474-4422(08)70164-9)

MacVicar, B. A., & Newman, E. A. (2015). Astrocyte Regulation of Blood Flow in the Brain. *Cold Spring Harbor Perspectives in Biology*, 7(5), a020388. <https://doi.org/10.1101/cshperspect.a020388>

Meng, L., & Gelb, A. W. (2015). Regulation of Cerebral Autoregulation by Carbon Dioxide. *Anesthesiology*, 122(1), 196–205. <https://doi.org/10.1097/ALN.0000000000000506>

Michinaga, S., Inoue, A., Yamamoto, H., Ryu, R., Inoue, A., Mizuguchi, H., & Koyama, Y. (2020). Endothelin receptor antagonists alleviate blood-brain barrier disruption and cerebral edema in a mouse model of traumatic brain injury: A comparison between bosentan and ambrisentan. *Neuropharmacology*, 175, 108182. <https://doi.org/10.1016/j.neuropharm.2020.108182>

MRC CRASH Trial Collaborators. (2008). Predicting outcome after traumatic brain injury: practical prognostic models based on large cohort of international patients. *BMJ*, 336(7641), 425–429. <https://doi.org/10.1136/bmj.39461.643438.25>

- Muizelaar, J. P., van der Poel, H. G., Li, Z. C., Kontos, H. a, & Levasseur, J. E. (1988). Pial arteriolar vessel diameter and CO₂ reactivity during prolonged hyperventilation in the rabbit. *Journal of Neurosurgery*, 69(6), 923–927. <https://doi.org/10.3171/jns.1988.69.6.0923>
- Mulligan, S. J., & MacVicar, B. A. (2004). Calcium transients in astrocyte endfeet cause cerebrovascular constrictions. *Nature*, 431(7005), 195–199. <https://doi.org/10.1038/nature02827>
- Munch, E. C., Bauhuf, C., Horn, P., Roth, H. R., Schmiedek, P., Vajkoczy, P., Münch, E. C., Bauhuf, C., Horn, P., Roth, H. R., Schmiedek, P., Vajkoczy, P., & Prospective, D. (2001). Therapy of malignant intracranial hypertension by controlled lumbar cerebrospinal fluid drainage. *Crit Care Med*, 29(5), 976–981. <https://doi.org/10.1097/00003246-200105000-00016>
- Naeimi, Z. S., Weinhofer, A., Sarahrudi, K., Heinz, T., & Vécsei, V. (2006). Predictive value of S-100B protein and neuron specific-enolase as markers of traumatic brain damage in clinical use. *Brain Injury*, 20(5), 463–468. <https://doi.org/10.1080/02699050600664418>
- Naqvi, J., Yap, K. H., Ahmad, G., & Ghosh, J. (2013). Transcranial Doppler ultrasound: A review of the physical principles and major applications in critical care. *International Journal of Vascular Medicine*, 2013. <https://doi.org/10.1155/2013/629378>
- Ng, I., Lim, J., & Wong, H. B. (2004). Effects of head posture on cerebral hemodynamics: its influences on intracranial pressure, cerebral perfusion pressure, and cerebral oxygenation. *Neurosurgery*, 54(3), 593–597; discussion 598. <https://doi.org/10.1227/01.NEU.0000108639.16783.39>
- Ng, S. Y., & Lee, A. Y. W. (2019). Traumatic Brain Injuries: Pathophysiology and Potential Therapeutic Targets. *Frontiers in Cellular Neuroscience*, 13. <https://doi.org/10.3389/fncel.2019.00528>
- Panerai, R. B., Kerins, V., Fan, L., Yeoman, P. M., Hope, T., & Evans, D. H. (2004a). Association between dynamic cerebral autoregulation and mortality in severe head injury. *British Journal of Neurosurgery*, 18(5), 471–479. <https://doi.org/10.1080/02688690400012343>
- Panerai, R. B., Kerins, V., Fan, L., Yeoman, P. M., Hope, T., & Evans, D. H. (2004b). Association between dynamic cerebral autoregulation and mortality in severe head injury. *British Journal of Neurosurgery*, 18(5), 471–479. <https://doi.org/10.1080/02688690400012343>

- Park, J., & Hwang, S.-K. (2021). Transcranial Doppler study in acute spontaneous intracerebral hemorrhage: The role of pulsatility index. *Journal of Cerebrovascular and Endovascular Neurosurgery*, 23(4), 334–342. <https://doi.org/10.7461/jcen.2021.E2021.05.001>
- Pohl, D., & Tenenbaum, S. (2012). Treatment of acute disseminated encephalomyelitis. *Current Treatment Options in Neurology*, 14(3), 264–275. <https://doi.org/10.1007/s11940-012-0170-0>
- Prins, M., Greco, T., Alexander, D., & Giza, C. C. (2013). The pathophysiology of traumatic brain injury at a glance. *Disease Models & Mechanisms*, 6(6), 1307–1315. <https://doi.org/10.1242/dmm.011585>
- Ract, C., Le Moigno, S., Bruder, N., & Vigué, B. (2007). Transcranial Doppler ultrasound goal-directed therapy for the early management of severe traumatic brain injury. *Intensive Care Medicine*, 33(4), 645–651. <https://doi.org/10.1007/s00134-007-0558-6>
- Rainey, T., Lesko, M., Sacho, R., Lecky, F., & Childs, C. (2009). Predicting outcome after severe traumatic brain injury using the serum S100B biomarker: Results using a single (24h) time-point. *Resuscitation*, 80(3), 341–345. <https://doi.org/10.1016/j.resuscitation.2008.11.021>
- Rangel-Castilla, L., Gasco, J., Nauta, H. J. W., Okonkwo, D. O., & Robertson, C. S. (2008a). Cerebral pressure autoregulation in traumatic brain injury. *Neurosurgical Focus*, 25(4), E7. <https://doi.org/10.3171/FOC.2008.25.10.E7>
- Rangel-Castilla, L., Gasco, J., Nauta, H. J. W., Okonkwo, D. O., & Robertson, C. S. (2008b). Cerebral pressure autoregulation in traumatic brain injury. *Neurosurgical Focus*, 25(4), E7. <https://doi.org/10.3171/FOC.2008.25.10.E7>
- Rink, C., & Khanna, S. (2011). Significance of Brain Tissue Oxygenation and the Arachidonic Acid Cascade in Stroke. *Antioxidants & Redox Signaling*, 14(10), 1889–1903. <https://doi.org/10.1089/ars.2010.3474>
- Rivera-Lara, L., Zorrilla-Vaca, A., Geocadin, R. G., Healy, R. J., Ziai, W., & Mirski, M. A. (2017). Cerebral autoregulation-oriented therapy at the bedside a comprehensive review. In *Anesthesiology* (Vol. 126, Issue 6, pp. 1187–1199). <https://doi.org/10.1097/ALN.0000000000001625>
- Scremin, O., Li, M., & Jenden, D. (1997). Cholinergic Modulation of Cerebral Cortical Blood Flow Changes Induced by Trauma. *Journal of Neurotrauma*, 14(8), 573–586. <https://doi.org/10.1089/neu.1997.14.573>

- Simard, J. M., & Bellefleur, M. (1989). Systemic arterial hypertension in head trauma. *The American Journal of Cardiology*, 63(6), C32–C35. [https://doi.org/10.1016/0002-9149\(89\)90403-7](https://doi.org/10.1016/0002-9149(89)90403-7)
- Smielewski, P., Czosnyka, M., Kirkpatrick, P., & Pickard, J. D. (1997). Evaluation of the transient hyperemic response test in head-injured patients. *Journal of Neurosurgery*, 86(5), 773–778. <https://doi.org/10.3171/jns.1997.86.5.0773>
- Steyerberg, E. W., Mushkudiani, N., Perel, P., Butcher, I., Lu, J., McHugh, G. S., Murray, G. D., Marmarou, A., Roberts, I., Habbema, J. D. F., & Maas, A. I. R. (2008). Predicting Outcome after Traumatic Brain Injury: Development and International Validation of Prognostic Scores Based on Admission Characteristics. *PLoS Medicine*, 5(8), e165. <https://doi.org/10.1371/journal.pmed.0050165>
- Strebel, S., Lam, A. M., Matta, B., Mayberg, T. S., Aaslid, R., & Newell, D. W. (1995). Dynamic and static cerebral autoregulation during isoflurane, desflurane, and propofol anesthesia. *Anesthesiology*, 83(1), 66–76. <https://doi.org/10.1097/00000542-199507000-00008>
- Sviri, G. E., Aaslid, R., Douville, C. M., Moore, A., & Newell, D. W. (2009). Time course for autoregulation recovery following severe traumatic brain injury. *Journal of Neurosurgery*, 111(4), 695–700. <https://doi.org/10.3171/2008.10.17686>
- The American College of Surgeons. (2013). Advanced trauma life support (ATLS®): the ninth edition. *The Journal of Trauma and Acute Care Surgery*, 1–392. <https://doi.org/10.1097/TA.0b013e31828b82f5>
- Timofeev, I., Santarius, T., Koliass, A. G., & Hutchinson, P. J. A. (2012a). Decompressive craniectomy - operative technique and perioperative care. *Advances and Technical Standards in Neurosurgery*, 38, 115–136. https://doi.org/10.1007/978-3-7091-0676-1_6
- Timofeev, I., Santarius, T., Koliass, A. G., & Hutchinson, P. J. A. (2012b). Decompressive craniectomy - operative technique and perioperative care. *Advances and Technical Standards in Neurosurgery*, 38, 115–136. https://doi.org/10.1007/978-3-7091-0676-1_6
- Toda, N., Ayajiki, K., & Okamura, T. (2009). Cerebral Blood Flow Regulation by Nitric Oxide: Recent Advances. *Pharmacological Reviews*, 61(1), 62–97. <https://doi.org/10.1124/pr.108.000547>
- Werner, C., & Engelhard, K. (2007). Pathophysiology of traumatic brain injury. *British Journal of Anaesthesia*, 99(1), 4–9. <https://doi.org/10.1093/bja/aem131>
- Wilson, J. T. L., Pettigrew, L. E. L., & Teasdale, G. M. (1998). Structured Interviews for the Glasgow Outcome Scale and the Extended Glasgow Outcome Scale: Guidelines

for Their Use. *Journal of Neurotrauma*, 15(8), 573–585.
<https://doi.org/10.1089/neu.1998.15.573>

Winn, H. R., Rubio, G. R., & Berne, R. M. (1981). The Role of Adenosine in the Regulation of Cerebral Blood Flow. *Journal of Cerebral Blood Flow & Metabolism*, 1(3), 239–244. <https://doi.org/10.1038/jcbfm.1981.29>