Universiteit Leiden
The Netherlands

Correction to: Management of moderate to severe traumatic brain injury: an update for the intensivist

Meyfroidt, G.; Bouzat, P.; Casaer, M.P.; Chesnut, R.; Hamada, S.R.; Helbok, R.; ... ; Citerio, G.

Citation
Meyfroidt, G., Bouzat, P., Casaer, M. P., Chesnut, R., Hamada, S. R., Helbok, R., ... Citerio, G. (2022). Correction to: Management of moderate to severe traumatic brain injury: an update for the intensivist. *Intensive Care Medicine*, *48*(7), 989-991. doi:10.1007/s00134-022-06759-1

Version: Publisher's Version
License: Licensed under Article 25fa Copyright Act/Law (Amendment Taverne)
Downloaded from: https://hdl.handle.net/1887/3564536

Note: To cite this publication please use the final published version (if applicable).

Intensive Care Med (2022) 48:989–991
https://doi.org/10.1007/s00134-022-06759-1

CORRECTION

Correction to: Management of moderate to severe traumatic brain injury: an update for the intensivist

Geert Meyfroidt[1*], Pierre Bouzat[2], Michael P. Casaer[1], Randall Chesnut[3], Sophie Rym Hamada[4], Raimund Helbok[5], Peter Hutchinson[6], Andrew I. R. Maas[7], Geoffrey Manley[8], David K. Menon[9], Virginia F. J. Newcombe[9], Mauro Oddo[10], Chiara Robba[11], Lori Shutter[12], Martin Smith[13], Ewout W. Steyerberg[14], Nino Stocchetti[15], Fabio Silvio Taccone[16], Lindsay Wilson[17], Elisa R. Zanier[18] and Giuseppe Citerio[19,20]

© 2022 Springer-Verlag GmbH Germany, part of Springer Nature

Correction to: Intensive Care Med https://doi.org/10.1007/s00134-022-06702-4

An incorrect version of the color legend of Figure 1 has been published. The authors apologise for the mistake. Please find the corrected Fig. 1 below.

(See figure on next page.)

Fig. 1 An algorithm for treating intracranial pressure (ICP) (modified from The Seattle International Severe Traumatic Brain Injury Consensus Conference (SIBICC)). In patients with ICP monitoring (with/without additional brain oxygen monitoring) the four represent the starting points for deciding a treatment strategy. Tier 0, i.e. basic strategies (not included in the flowchart), apply to TBI patients who are admitted to an intensive care unit (ICU) for whom the decision to monitor ICP has been made. The goal of tier-zero is to establish a stable, neuroprotective physiologic baseline regardless of eventual ICP readings. Tier-zero sedatives and analgesics target comfort and ventilator tolerance, temperature management targets the avoidance of fever and CPP > 60 mm Hg. Lower tier treatments are viewed as having a more favorable side effect profile than higher tiers and generally should be employed first. Treatments in any given tier are considered equivalent, with the selection of one treatment over another based on individual patient characteristics and physician discretion and multiple items from a single tier can be trialed individually or in combination with the goal of a rapid response. The provider should consider moving to more aggressive interventions in a higher tier quickly if the patient is not responding. Panel **A** Patients with ICP below the threshold usually do not need treatment except for conditions in which a high intracranial pressure–time burden is present because this condition is associated with worse outcomes. Refer to [1] for details. Therefore, in this setting, treatment could be considered also below the classical threshold of 22 mmHg. Panel **B** Consensus-based algorithm for the management of severe traumatic brain injury with brain hypoxia and normal intracranial pressure. Panel **C** Consensus-based algorithm for the management of severe traumatic brain injury with intracranial hypertension and brain hypoxia. Panel **D** Consensus-based algorithm for the management of severe traumatic brain injury with intracranial hypertension and normal brain oxygenation. Inter-tier recommendations encourage patient reassessment for remediable causes of treatment resistance. Stepping to a higher tier is a potential indicator of increased disease severity. As higher tiers represent interventions with increased associated risks, we recommend reassessing the patient's basic intra-and extra-cranial physiologic status and reconsidering the surgical status of intracranial mass lesions not previously considered operative

*Correspondence: geert.meyfroidt@kuleuven.be
[1] Department and Laboratory of Intensive Care Medicine, University Hospitals Leuven and KU Leuven, Leuven, Belgium
Full author information is available at the end of the article

The original article can be found online at https://doi.org/10.1007/s00134-022-06702-4.

Springer

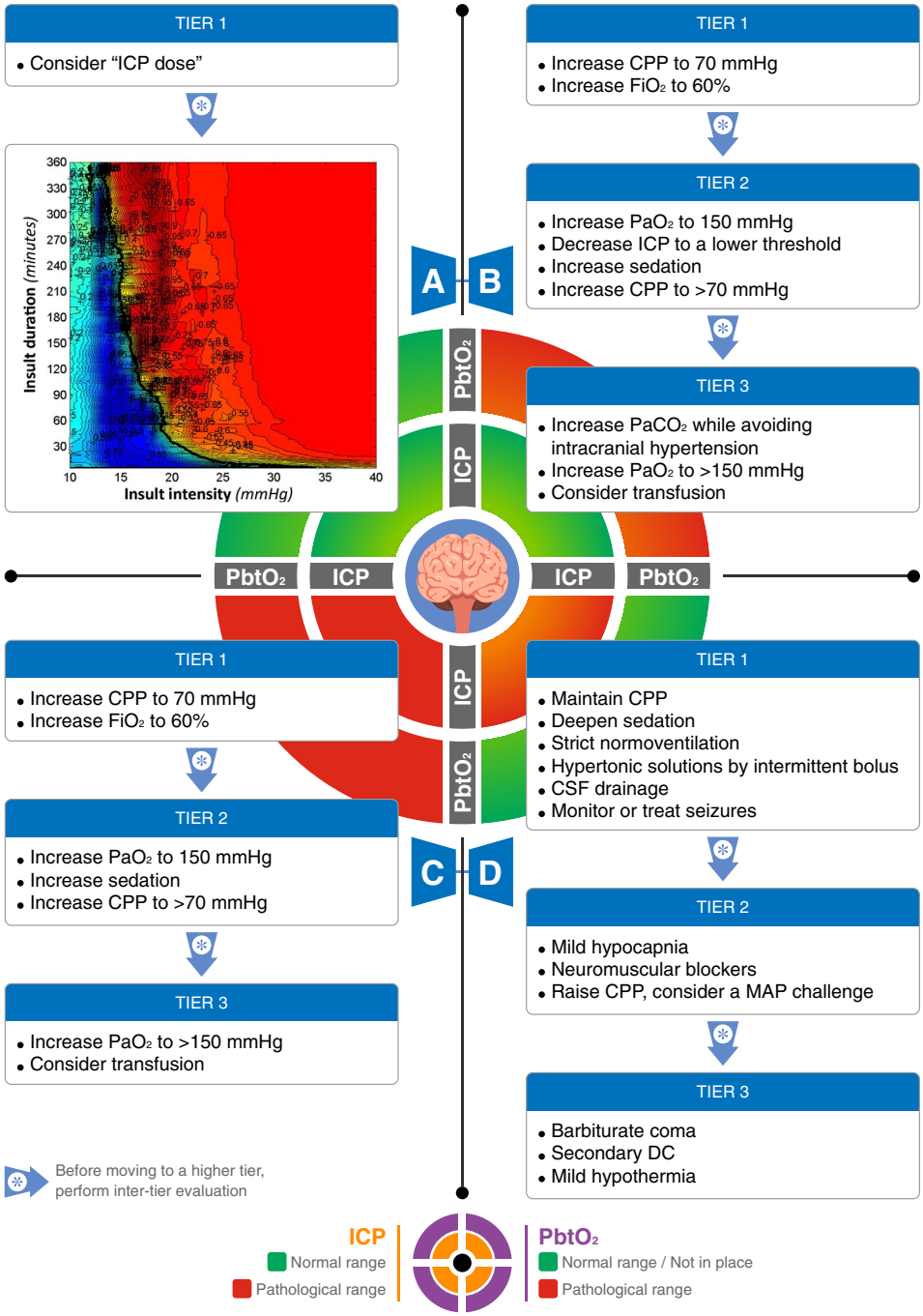

Fig. 1 (See legend on previous page.)

Author details
[1] Department and Laboratory of Intensive Care Medicine, University Hospitals Leuven and KU Leuven, Leuven, Belgium. [2] Université Grenoble Alpes, Inserm, U1216, CHU Grenoble Alpes, Grenoble Institut Neurosciences, Grenoble, France. [3] Department of Neurological Surgery, Department of Orthopaedic Surgery, Harborview Medical Center, University of Washington, Seattle, Washington, USA. [4] Anaesthesia and Critical Care Department, AP-HP, Hôpital Bicêtre, Hôpitaux Universitaires Paris Sud, Université Paris Sud, 78 rue du Général Leclerc, Le Kremlin Bicêtre 94275, France. [5] Department of Neurology, Neurocritical Care Unit, Innsbruck, Austria. [6] Department of Academic Neurosurgery, Cambridge University Hospital NHS Foundation Trust, Cambridge, UK. [7] Department of Neurosurgery, University Hospital Antwerp, Edegem, Belgium. [8] Brain and Spinal Injury Center, Department of Neurosurgery, University of California, San Francisco, San Francisco, CA, USA. [9] Department of Medicine, University Division of Anaesthesia, University of Cambridge, Cambridge, UK. [10] Faculty of Biology and Medicine, Université de Lausanne, Lausanne, Switzerland. [11] Anesthesia and Intensive Care, Policlinico San Martino, IRCCS for Oncology and Neuroscience and Dipartimento di Scienze Chirurgiche e Diagnostiche Integrate, University of Genoa, Genova, Italy. [12] Critical Care Medicine, Neurology, and Neurosurgery, UPMC/University of Pittsburgh School of Medicine, Pittsburgh, Pensylvania, USA. [13] Neurocritical Care Unit, The National Hospital for Neurology and Neurosurgery, University College London Hospitals and National Institute for Health Research Biomedical Research Centre, London, UK. [14] Clinical Biostatistics and Medical Decision Making, Leiden University Medical Center, Leiden, The Netherlands. [15] Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy. [16] Department of Intensive Care, Université Libre de Bruxelles (ULB) and Laboratoire de Recherche Experimentale, Department of Intensive Care, Hôpital Erasme, Brussels, Belgium. [17] Division of Psychology, University of Stirling, Stirling, UK. [18] Laboratory of Acute Brain Injury and Therapeutic Strategies, Dept of Neuroscience, Mario Negri Institute for Pharmacological Research IRCCS, Milan, Italy. [19] School of Medicine and Surgery, University of Milano-Bicocca, Milan, Italy. [20] Neurointensive Care Unit, San Gerardo Hospital, Monza, Italy.

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Published: 20 June 2022