

Documents

Chadha, R.^a, Sakai, T.^b, Rajakumar, A.^c, Shingina, A.^d, Yoon, U.^e, Patel, D.^f, Spiro, M.^g, Bhangu, P.^h, Sun, L.-Y.ⁱ, Humar, A.^j, Bezinover, D.^k, Findlay, J.^l, Saigal, S.^m, Singh, S.ⁿ, Yi, N.-J.^o, Rodriguez-Davalos, M.^p, Kumar, L.^q, Kumaran, V.^r, Agarwal, S.^m, Berlakovich, G.^s, Egawa, H.^t, Lerut, J.^u, Clemens Broering, D.^v, Berenguer, M.^w, Catral, M.^x, Clavien, P.-A.^y, Chen, C.-L.^z, Shah, S.^{aa}, Zhu, Z.-J.^{ab ac}, Ascher, N.^{ad}, Bhangu, P.^h, Rammohan, A.^c, Emond, J.^{ae}, Rela, M.^c

Anesthesia and Critical Care for the Prediction and Prevention for Small-for-size Syndrome: Guidelines from the ILTS-iLDT-LTSI Consensus Conference

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^a Department of Anesthesiology and Perioperative Medicine, Mayo Clinic, Jacksonville, FL, United States

^b Department of Anesthesiology and Perioperative Medicine, University of Pittsburgh School of Medicine, Pittsburgh, PA, United States

^c Institute of Liver Disease and Transplantation, Dr Rela Institute and Medical Centre, Bharath Institute of Higher Education and Research, Chennai, India

^d Department of Medicine, Division of Gastroenterology, Hepatology and Nutrition, Vanderbilt University Medical Center, Nashville, TN, United States

^e Department of Anesthesiology, Thomas Jefferson University Hospital, Philadelphia, PA, United States

^f Department of Anesthesia and Intensive Care Medicine, Addenbrooke's Hospital, Cambridge, United Kingdom

^g Department of Anaesthesia, Royal Devon and Exeter, The Royal Free Hospital, London, United Kingdom

^h Medanta Institute of Liver Transplantation and Regenerative Medicine, Medanta-The Medicity, Delhi, India

ⁱ Department of Critical Liver Diseases, Beijing Friendship Hospital, Capital Medical University, Beijing, China

^j Division of Transplantation, Department of Surgery, University of Pittsburgh Medical Center, Pittsburgh, PA, United States

^k Department of Anesthesiology and Critical Care, University of Pennsylvania, Philadelphia, PA, United States

^l Department of Anesthesiology and Perioperative Medicine, Mayo Clinic, Rochester, MN, United States

^m Centre of Liver and Biliary Sciences, Centre of Gastroenterology, Hepatology and Endoscopy, Max Super Specialty Hospital, New Delhi, India

ⁿ Department of Anesthesiology and Critical Care, Max Super Specialty Hospital, Saket, New Delhi, India

^o Division of HBP Surgery, Department of Surgery, Seoul National University, College of Medicine, Seoul, South Korea

^p Division of Transplantation and Advanced Hepatobiliary Surgery, University of Utah, Primary Children's Hospital, Salt Lake City, UT, United States

^q Department of Anesthesiology, Amrita Hospital, Kochi, India

^r Division of Transplant Surgery, Department of Surgery, VCU Medical Center, Richmond, VA, United States

^s Department of Surgery, Medical University of Vienna, Vienna, Austria

^t Department of Surgery, Tokyo Women's Medical University, Tokyo, Japan

^u Cliniques Universitaires Saint-Luc, Brussels, Belgium

^v Organ Transplant Center of Excellence, King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia

^w Liver Transplantation and Hepatology Unit, La Fe University Hospital and IISLaFe and Ciberehd, Valencia, Spain

^x Ajmera Transplant Center, University of Toronto, Toronto, ON, Canada

^y University Hospital Zurich, Zürich, Switzerland

^z Liver Transplantation Centre, Kaohsiung Chang Gung Memorial Hospital, Kaohsiung, Taiwan

^{aa} Department of Hepatology, Institute of Liver Disease, HPB Surgery and Transplant, Global Hospitals, Mumbai, India

^{ab} Liver Transplantation Center, National Clinical Research Center for Digestive Diseases, Beijing Friendship Hospital, Capital Medical University, Beijing, China

^{ac} Clinical Center for Pediatric Liver Transplantation, Capital Medical University, Beijing, China

^{ad} Department of Surgery, University of California, San Francisco, San Francisco, CA, United States

^{ae} Liver and Abdominal Transplant Surgery, Columbia University Irving Medical Center, New York, NY, United States

Abstract

Background. During the perioperative period of living donor liver transplantation, anesthesiologists and intensivists may encounter patients in receipt of small grafts that puts them at risk of developing small for size syndrome (SFSS). **Methods.** A scientific committee (106 members from 21 countries) performed an extensive literature review on aspects of SFSS with proposed recommendations. Recommendations underwent a blinded review by an independent expert panel and discussion/voting on the recommendations occurred at a consensus conference organized by the International Liver Transplantation Society, International Living Donor Liver Transplantation Group, and Liver Transplantation Society of India.

Results. It was determined that centers with experience in living donor liver transplantation should utilize potential small for size grafts. Higher risk recipients with sarcopenia, cardiopulmonary, and renal dysfunction should receive small for size grafts with caution. In the intraoperative phase, a restrictive fluid strategy should be considered along with routine use of cardiac output monitoring, as well as use of pharmacologic portal flow modulation when appropriate. Postoperatively, these patients can be considered for enhanced recovery and should receive proactive monitoring for SFSS, nutrition optimization, infection prevention, and consideration for early renal replacement therapy for avoidance of graft congestion. **Conclusions.** Our recommendations provide a framework for the optimal anesthetic and critical care management in the perioperative period for patients with grafts that put them at risk of developing SFSS. There is a significant limitation in the level of evidence for most recommendations. This statement aims to provide guidance for future research in the perioperative management of SFSS. © 2023 Lippincott Williams and Wilkins. All rights reserved.

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Correspondence Address

Chadha R.; Department of Anesthesiology and Perioperative Medicine, 4500 San Pablo Rd, United States; email: chadha.ryan@mayo.edu

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