

Cambridge University Press 978-1-107-01379-7 - Liver Disease in Children: Fourth edition Edited by Frederick J. Suchy, Ronald J. Sokol and William F. Balistreri Copyright Information More information

# **Liver Disease in Children**

#### **Fourth Edition**

Edited by

### Frederick J. Suchy, MD

Chief Research Officer and Director,
Children's Hospital Colorado Research Institute, Children's Hospital Colorado;
Professor of Pediatrics and Associate Dean for Child Health Research,
University of Colorado School of Medicine, Aurora, CO, USA

#### Ronald J. Sokol, MD

Professor and Vice Chair of Pediatrics;
Section Head, Gastroenterology, Hepatology and Nutrition;
Director, Colorado Clinical and Translational Sciences Institute; and Arnold Silverman MD Chair in Digestive Health,
University of Colorado School of Medicine and Children's Hospital Colorado, Aurora, CO, USA

#### William F. Balistreri, MD

Director Emeritus,

Pediatric Liver Care Center; Medical Director Emeritus, Liver Transplantation;
Dorothy M. M. Kersten Professor of Pediatrics, Division of Gastroenterology, Hepatology and Nutrition,
Cincinnati Children's Hospital Medical Center, University of Cincinnati College of Medicine, Cincinnati, OH, USA





Cambridge University Press 978-1-107-01379-7 - Liver Disease in Children: Fourth edition Edited by Frederick J. Suchy, Ronald J. Sokol and William F. Balistreri Copyright Information More information

## CAMBRIDGE UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781107013797

Fourth edition © Cambridge University Press 2014 Third edition © Cambridge University Press 2007 Second edition © Lippincott, Williams & Wilkins 2001 First edition © Mosby 1994

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First edition first published 1994 Second edition first published 2001 Third edition first published 2007 Fourth edition first published 2014 Reprinted 2015

Printed in Spain by Grafos SA, Arte Sobre Papel, Barcelona

A catalogue record for this publication is available from the British Library

 $Library\ of\ Congress\ Cataloging-in-Publication\ Data$ 

Liver disease in children. – Fourth edition / edited by Frederick J. Suchy, MD, chief research officer, and director, The Children's Hospital Research Institute, Children's Hospital Colorado, professor of pediatrics and associate dean for Child Health Research, University of Colorado School of Medicine, Aurora, CO, USA, Ronald J. Sokol, MD, professor and vice chair of pediatrics, section head, Gastroenterology, Hepatology and Nutrition, director, Colorado Clinical and Translational Sciences Institute; and Arnold Silverman MD, chair in digestive health, University of Colorado School of Medicine and Children's Hospital Colorado, Aurora, CO, USA, William F. Balistreri, MD, director emeritus, Pediatric Liver Care Center, medical director emeritus, Liver Transplantation, and Dorothy M. M. Kersten, professor of pediatrics, Division of Gastroenterology, Hepatology and Nutrition, Cincinnati Children's Hospital Medical Center, University of Cincinnati College of Medicine, Cincinnati, OH, USA.

pages cm

ISBN 978-1-107-01379-7 (Hardback)

 $\begin{array}{lll} {\rm 1.\ \ Liver-Diseases.} & {\rm 2.\ \ Pediatric\ \, gastroenterology.} & {\rm I.\ \, Suchy,\ \, Frederick\ \, J.,\ \, editor} \\ {\rm of\ \, compilation.} & {\rm III.\ \, Sokol,\ \, Ronald\ \, J.,\ \, editor\ \, of\ \, compilation.} \\ {\rm William\ \, F.,\ \, editor\ \, of\ \, compilation.} \end{array}$ 

RJ456.L5L575 2014

618.92′362-dc23 2013021438

ISBN 978-1-107-01379-7 Hardback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication, and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.

Every effort has been made in preparing this book to provide accurate and up-to-date information which is in accord with accepted standards and practice at the time of publication. Although case histories are drawn from actual cases, every effort has been made to disguise the identities of the individuals involved. Nevertheless, the authors, editors and publishers can make no warranties that the information contained herein is totally free from error, not least because clinical standards are constantly changing through research and regulation. The authors, editors and publishers therefore disclaim all liability for direct or consequential damages resulting from the use of material contained in this book. Readers are strongly advised to pay careful attention to information provided by the manufacturer of any drugs or equipment that they plan to use.