Liver Disease in Children

Fourth Edition
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Preface

Seven years have passed since the publication of the third edition of *Liver Disease in Children*. This text continues to be the premier, comprehensive reference on pediatric liver disease. Pediatric hepatology continues to grow and evolve as a distinct discipline and so it remains a challenge to provide comprehensive coverage without markedly increasing the length of this text. To keep the size of this textbook within limits, the number of references for each chapter has been limited to classical and the most relevant current citations. The editors felt that this was a reasonable compromise, since ready access to the literature is possible through resources such as PubMed.

We have appreciated the contributions of so many of our colleagues over the past two decades, but to ensure a fresh perspective and to involve experts who have emerged in the field, 11 of the chapters are written by authors contributing to this textbook for the first time. These contributors have provided particular expertise in areas such as liver development, autoimmune liver disease, intestinal failure-associated liver disease, fatty liver disease, and inborn errors of metabolism. There is also expanded coverage of liver transplantation.

As has been the case with its predecessors, this fourth edition presents a critical review of pediatric hepatology and its scientific underpinnings by recognized experts in the field. Major advances have occurred, notably in the understanding of liver development, molecular physiology of the liver and biliary tract, and molecular virology. Our ability to diagnose and treat children with liver disease has continued to improve. Genome-wide association studies are defining new risk factors for disorders such as non-alcoholic fatty liver disease, hepatitis B and C infection, biliary atresia, hepatic malignancy, and autoimmune liver disease. The ability to diagnose previously enigmatic disorders or identify modifier genes through whole exome or whole genome sequencing is becoming more common. The correlation of phenotype with genotype is sometimes possible. Genetic determinants of liver fibrosis are also being identified. Variants in genes involved in drug metabolism, drug transport, and the immune response have been linked to the risk of some adverse drug reactions. Emerging technologies are bearing fruit as new therapeutics for liver disease and hepatic fibrosis are becoming available, and these will need detailed evaluation in children. There is increasing emphasis on the notion of personalized medicine in which thorough phenotyping of patients is correlated with a wealth of genomic data to better understand and treat our patients.

We are grateful to all of our contributing authors for their efforts in crafting the fourth edition of *Liver Disease in Children*. We are confident that it will remain an essential reference for all physicians involved in the care of children with liver disease.

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