

Preface

Non-Malignant Disorders of the Blood in Infants and Children



George R. Buchanan, MD
Guest Editor

These are exciting times for pediatric hematologists and their patients. Major advances during the past decade have enhanced our understanding of the pathophysiology, management, and outcome of many hematologic disorders. Several factors have contributed to this progress, including the completion of the Human Genome Project, increased research funding from the National Institutes of Health (NIH), creative and robust initiatives by the pharmaceutical industry, and committed efforts by numerous hematologists worldwide.

Several other recent developments are enhancing the research armamentarium in the hematology community. One is the establishment by the NIH of clinical trials networks of investigators and research centers that are aimed at studying thalassemia, hemorrhagic disorders, blood transfusion therapy, sickle cell disease, and stem cell transplantation. It is with great excitement that the concept of multi-center clinical trials, which has been so successful in pediatric oncology during the past 4 decades, is being endorsed for patients who have benign hematologic disorders as well. Opportunities also abound for promising young investigators. The American Society of Hematology's new Clinical Research Training Institute and a sizable expansion of their Scholar Award Program, the NIH loan repayment program, and other novel grant support mechanisms now make it possible for young persons who are committed to a career in hematology research and education to obtain the necessary support for their extended period of training.

With these developments in mind, I enthusiastically accepted the offer to edit this issue of the *Hematology/Oncology Clinics of North America* on “Nonmalignant Pediatric Hematology.” For most of the articles I paired an established senior investigator in the field with a promising young clinical scientist. The products of this collaboration of the young and the “not-so-young” should bring us up to date in many areas.

It seems highly appropriate that the first article in this issue be written by senior leadership in the Division of Blood Diseases and Resources at the National Heart, Lung, and Blood Institute (NHLBI). This work nicely reviews the tremendous breadth and depth of initiatives that have been undertaken by NHLBI these past few years in support of hematology research and research training. One important and developing domain of clinical investigation involves assessment of health-related quality of life; the contribution in this issue reviews the terminology, methodology, and progress to date. Several updates on hemorrhagic and thrombotic disorders also are included. These focus on hemophilia, von Willebrand disease, childhood idiopathic thrombocytopenic purpura, and thrombosis. Junior and senior authors compare notes and offer insights regarding new diagnostic and management strategies.

The need to perform multi-center clinical trials in sickle cell disease has been noticed by all. Therefore, it seems timely to address one of the key issues that faces the sickle cell clinician and investigator—why some patients fare well, whereas others have severe complications of their disease. The definition of phenotype and assessment of risk thus represent critically important subjects. Iron overload that results from chronic transfusions or as a consequence of enhanced iron absorption also are “hot topics” in hematology; experts in these areas have offered their insights as well. Hematologic problems that primarily affect the red cell are encountered increasingly in southeast Asian immigrants and represent a timely subject for today’s hematologist. Iron deficiency, the most common hematologic problem that faces children, has not been eradicated and also warrants discussion. Finally, the leukocyte has not been forgotten. An update on the molecular, cellular, and clinical features of childhood neutropenias seems fitting.

It is hoped that the offerings in this issue will prove helpful to the clinician and investigator and serve as useful educational vehicles for trainees to whom we wish to expose the excitement of hematology.

George R. Buchanan, MD
Department of Pediatrics
University of Texas Southwestern Medical Center at Dallas
5323 Harry Hines Boulevard
Dallas, TX 75390-9063, USA
E-mail address: george.buchanan@utsouthwestern.edu