Sickle cell disease (SCD) is the most common genetic disease globally and sickle cell anemia (SCA) is its most common and most severe form. Over 300,000 children are born each year with severe SCD mostly in Africa and about 80% of these have SCA. In the USA there are about 100,000 patients with SCD most of whom have SCA. The phenotypic expression of these disorders and their clinical severity vary greatly among patients and longitudinally in the same patient. They are multisystem disorders and influence all aspects of the life of affected individuals. The clinical manifestations of SCD are extremely variable and include four distinct sets of (1) pain syndromes, (2) anemia and its sequelae, (3) organ failure, including infection and (4) co-morbid conditions. Some of these complications can have devastating potentially fatal consequences if they are unrecognized. However, acute episodes of pain commonly referred to as vaso-occlusive crises (VOC) are the hallmark of SCD and dominate its clinical picture throughout the life of patients and they are the most common cause of hospital admissions. The intermittent nature and acuity of these VOCs made the emergency department (ED) the obvious and most important site of care. Most hospital admissions for patients with SCD are for patients that come through the ED. This presentation will briefly review the common complications of SCD and their management that occur sequentially from infancy to adulthood with emphasis on dactylitis, infections, splenic sequestration, stroke, VOCs, acute cheat syndrome and organ damage.

Biography

Samir K Ballas received his MD with distinction from the American University of Beirut-Lebanon in 1967. He completed his training in Hematology at Thomas Jefferson University in Philadelphia, Pennsylvania. He is Board Certified in Internal Medicine, Hematology, Blood Banking, Pain Medicine and Pain Management. He is currently Emeritus Professor of medicine and Pediatrics at Thomas Jefferson University and honorary staff member of HEMORIO, the Hematology Institute in Rio de Janeiro, Brazil. He has authored or co-authored over 800 articles, book chapters and abstracts. He also published two editions of a Book on sickle cell pain in 1998 and 2014 respectively.