Editorial
Unanswered Questions in HIV Hematology

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Hematological abnormalities are common manifestations of HIV infection that are regularly encountered in the clinical setting. Although initially recognized with the first descriptions of HIV infection over 30 years ago, our understanding of the epidemiology, natural history, and treatment of these blood disorders continues to evolve. Aggressive lymphomas such as diffuse large B-cell lymphoma and primary CNS lymphoma have decreased since the introduction of combination antiretroviral therapy (cART), though these and other HIV-associated malignancies continue to evolve. Aggressive lymphomas such as diffuse large B-cell lymphoma and primary CNS lymphoma have decreased since the introduction of combination antiretroviral therapy (cART), though these and other HIV-associated malignancies continue to evolve.

Two papers focus on HIV-associated Burkitt lymphoma (BL). Though the outcome of HIV-NHL has improved substantially in the cART era, the outcome of HIV-BL with standard chemotherapy remains poor. J. A. Rodrigo et al. describe the combined experience in four Canadian centers treating patients with HIV-BL with the CODOX-M/IVAC regimen with or without rituximab in the modern era. In this study, intensive chemotherapy with CODOX-M/IVAC ± R yielded acceptable toxicity and favorable survival rates. A. M. Petrich et al. review the larger picture in the treatment of HIV-BL in the paper entitled “paradigms and controversies in the treatment of HIV-related Burkitt lymphoma.” In this paper, available data on the treatment of patients with HIV-BL with current BL-directed chemotherapy regimens are discussed in detail, including Hyper-CVAD, dose-adjusted EPOCH, the PETHEMA regimen, and CODOX-M/IVAC.

An intriguing and pressing challenge in the management of patients with both malignant and nonmalignant hematologic disorders in HIV infection is the optimal approach to be taken in the developing world. This topic is addressed by M. Ulrickson et al. in the paper “Epidemiology, diagnosis, and treatment of HIV-associated NHL in resource-limited settings.” The epidemiology of NHL in Africa is compared to that of the US, and discrepancies in survival highlighted by cancer registries are discussed. Challenges in managing patients with NHL in resource-limited settings include diagnostic challenges due to limited access to a full battery of immunohistochemical tests and limited molecular testing.
Treatment challenges include limited access to antiretroviral regimens, prophylactic agents, IV infusion centers, and a higher incidence of major infectious complications including tuberculosis and hepatitis B. Response assessments are further limited by a lack of ready access to cross-sectional imaging in some regions. Despite these challenges, progress has been made in developing tolerable and effective treatment regimens appropriate to these circumstances, and these important advances are reviewed.

A common nonmalignant complication of HIV infection is immune thrombocytopenia (ITP). The characteristics of HIV-associated ITP were documented prior to the cART era, and the optimal treatment beyond cART is unknown. For this reason, K. L. S. Ambler et al. present a retrospective cohort study reviewing individuals with severe HIV-associated ITP diagnosed in the cART era. Their series is the largest such report of severe HIV-ITP in the post-cART era. The major finding from this study was that, although the various treatments were well tolerated and most patients achieved a safe platelet count, nearly all patients (87%) required retreatment for recurrence of severe ITP. This highlights that new approaches to the treatment of ITP in this population are needed.

The intent of this special issue was to initiate interest in and further inquiry into the many hematologic complications faced by persons living with HIV. In addition to the topics discussed in this issue, areas for future exploration include the approach to management of patients with less common lymphoproliferative disorders such as indolent NHL, paraproteinemias, and Castleman disease, as well as non-malignant causes of cytopenias and their management.

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