Preface

Lymphoma and leukemia of the nervous system may be defined as direct or indirect involvement of the central or peripheral nervous systems by these malignancies. The diagnosis and management of these conditions is the subject of this book. In the first part of the book the focus is on primary central nervous system lymphoma (PCNSL), an uncommon type of non-Hodgkin lymphoma confined to the nervous system. The first two chapters of the book are an overview of the lymphoid malignancies and leukemias for non-oncologists. This introduction is followed by chapters on the pathology, epidemiology, diagnosis and management of PCNSL. These chapters review PCNSL in “immunocompetent” hosts as well as in the setting of immunosuppression. The management of patients with PCNSL involves treatment regimens that are different than the typical approaches used in patients with primary brain tumors or with systemic forms of non-Hodgkin lymphoma. The optimal treatment for patients with PCNSL has yet to be defined and several fundamental therapeutic questions, including the optimal role of radiation and other consolidation therapies, are unresolved. In the final chapters of this section a number of special topics including ocular lymphoma, neurolymphomatosis and intravascular lymphoma of the nervous system are reviewed.

In the second part of the book the neurological complications of the lymphoid malignancies and leukemias are reviewed. The neurotoxicity of therapies for lymphoma and leukemia are also covered in this section of the book. Brain, epidural and leptomeningeal metastases are examples of direct involvement of the nervous system while paraneoplastic complications are an example of indirect involvement of the nervous system. Although exceptions exist the prognosis is usually poor once lymphoma or leukemia involves the nervous system. Prevention of neurological complications with better systemic therapy and, possibly, prophylactic intrathecal chemotherapy are areas of active investigation.

The diagnosis and management of patients with lymphoma and leukemia of the nervous system involves an interdisciplinary team of hematologists, oncologists, radiation oncologists, neurologists, neurosurgeons and pathologists. A single source of information regarding this group of diseases and complications will hopefully serve as a useful resource for these physicians.

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