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# LEPTOMENINGEAL METASTASES

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## **INTRODUCTION**

Leptomeningeal metastases are an increasingly important complication of systemic malignancy. Historically, leptomeningeal dissemination was detected in the setting of widespread systemic tumor progression and heralded the terminal phase of a patient's tumor. However, as current solid tumor therapies have improved, it is becoming more common to encounter isolated leptomeningeal progression in a patient with a quiescent systemic tumor. Furthermore, as cancer patients are surviving longer, the incidence of leptomeningeal metastases appears to be increasing, particularly in solid tumor types not previously associated with leptomeningeal spread such as ovarian and colorectal cancer. Therefore, it is critical to have a complete understanding of the disease process and therapeutic options in order to optimize the management of patients with leptomeningeal tumor. Select patients who are managed aggressively can have prolonged survival with preservation of neurologic function and quality of life.

Optimal management of leptomeningeal metastasis requires a multi-disciplinary approach. This book draws on the expertise of neurosurgeons, medical oncologists, neurologists, neuro-oncologists, pediatric oncologists and radiation oncologists. As a result, this book provides an excellent overview of this disease process from the anatomy and physiology of the cerebrospinal fluid compartment to the scope and impact of this complication in specific malignancies. Current treatment options, both symptomatic and therapeutic, as well as new approaches to treatment are carefully reviewed. As it is clear that better therapies are desperately needed for this patient population, therapies in development and future research directions are the focus of the last chapter.

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