

Preface

Metastatic Spine Disease



Meic H. Schmidt, MD



Daryl R. Fournery, MD, FRCSC



Ziya L. Gokaslan, MD, FACS

Guest Editors

Metastatic spine disease is a growing problem among cancer patients. The most dreaded complications are disabling pain and spinal cord compression, which can result in permanent paralysis and incontinence. The impact of malignant spinal cord injury on quality of life is immeasurable. Spinal cord compression caused by epidural metastases occurs in 5% to 10% of cancer patients and up to 40% of patients who have pre-existing nonspinal bone metastases. Symptomatic spinal cord compression is estimated to occur in over 25,000 patients each year, making malignant spinal cord compression one of the leading causes of spinal cord injury. With an increasing number of patients diagnosed with cancer and improving 5-year survival rates for many common cancers, this number is expected to grow.

The management of metastatic spinal disease has evolved considerably over the last few decades. The poor results of decompressive laminectomy in unselected patients in the 1960s and 1970s led to radiation becoming the mainstay of therapy for malignant spinal cord compression. Surgery was rarely performed and usually was not advocated until the patient had failed radiation. More

recently, the increasing recognition of complications and poor outcomes of surgery for cancer patients who received preoperative radiation, combined with more accurate imaging to define appropriate surgical strategies, have renewed the interest in surgery for spinal metastasis. Tailored approaches that result in complete spinal cord decompression and the use of modern spinal stabilization techniques have resulted in significant outcome-related improvement in pain control, neurologic preservation, and recovery. The growing role of spinal surgery and the introduction of new therapies for metastatic spine disease such as kyphoplasty and spinal radiosurgery will certainly expand the involvement of neurosurgeons in the management of these patients. Multidisciplinary treatment planning and well-designed clinical research are needed to fully evaluate and individualize therapy for patients who have metastatic spinal disease with the ultimate goal of maximizing function and quality of life.

In this issue of the *Neurosurgical Clinics of North America*, we hope to reflect the current state-of-the-art in the multidisciplinary management of metastatic spine disease. We would like

to thank all of the contributors for their excellent contributions, and we hope that readers find this issue to be valuable and enjoyable.

Meic H. Schmidt, MD
*Division of Spinal Oncology
Department of Neurosurgery
University of Utah Medical Center
30 North 1900 East, Suite 3B-409
Salt Lake City, UT 84132-2303, USA
E-mail address: meic.schmidt@hsc.utah.edu*

Daryl R. Fourney, MD, FRCSC
Division of Neurosurgery

*University of Saskatchewan
Royal University Hospital
103 Hospital Drive
Saskatoon, Saskatchewan S7N 0W8, Canada*

E-mail address: daryl.fourney@saskatoonhealthregion.ca

Ziya Gokaslan, MD, FACS
*Department of Neurosurgery, Neurosurgical
Spine Program
John Hopkins University
600 N. Wolfe Street, Meyer 7-109
Baltimore, MD 21287, USA
E-mail address: zgokasl1@jhmi.edu*