Bone and Soft-Tissue Sarcomas:
What the Options Are, How to Advise Patients

Supplement 1 to Volume 77 • March 2010 • www.ccjm.org/content/77/Suppl_1

Supplement Co-Editors

Steven A. Lietman, MD
Director, Musculoskeletal Tumor Center
Department of Orthopaedic Surgery
Cleveland Clinic

Risal Djohan, MD
Department of Plastic Surgery
Cleveland Clinic

Contents

Clinical presentation and imaging of bone and soft-tissue sarcomas S2
Hakan Ilaslan, MD; Jean Schils, MD; William Nageotte, PA-C; Steven A. Lietman, MD; and Murali Sundaram, MD

Bone sarcomas: Overview of management, with a focus on surgical treatment considerations..... S8
Steven A. Lietman, MD, and Michael J. Joyce, MD

Soft-tissue sarcomas: Overview of management, with a focus on surgical treatment considerations.....S13
Steven A. Lietman, MD

Considerations surrounding reconstruction after resection of musculoskeletal sarcomas.... S18
Andrea Moreira-Gonzalez, MD; Risal Djohan, MD; and Robert Lohman, MD

Use of chemotherapy for patients with bone and soft-tissue sarcomas S23
Robert Wesolowski, MD, and George Thomas Budd, MD

Use of radiation therapy for patients with soft-tissue and bone sarcomas S27
Lawrence J. Sheplan, MD, and Justin J. Juliano, MD

From the editors

Bone and soft-tissue sarcomas are relatively rare, yet their tendency to develop predominantly during adolescence and young adulthood makes these cancers particularly compelling and worthy of efforts toward early detection and effective management.

The past two decades have seen important advances in the management of patients with these musculoskeletal sarcomas, with resulting improvements in survival and quality of life. Whereas standard therapy for musculoskeletal sarcomas of the extremities used to be limb amputation, most patients today can be successfully managed with limb-sparing surgery. This progress has been made possible by advances in chemotherapy and radiation therapy as well as in surgical techniques.

We conceived of this supplement as an opportunity to provide information about these advances to physicians practicing outside of specialized tertiary care centers, for whom these sarcomas are rare but nevertheless occasionally encountered. *It has been written for nonspecialists in sarcoma, including family physicians, pediatricians, internists, and general surgeons.* Our aim is to help you better evaluate patients with masses suspicious for musculoskeletal sarcoma and advise your patients with confirmed sarcoma about their treatment options and post-therapy management.

Steven A. Lietman, MD
lietmas@ccf.org

Risal Djohan, MD
djohanr@ccf.org

The supplement editors gratefully acknowledge the following two colleagues for peer reviewing manuscripts for this supplement:

- *Timothy Gilligan, MD, MS, Department of Solid Tumor Oncology, Cleveland Clinic*
- *Theodore Suh, MD, PhD, MHSc, Department of Internal Medicine, Cleveland Clinic*

Copyright © 2010 The Cleveland Clinic Foundation. All rights reserved.

The statements and opinions expressed in this supplement to the *Cleveland Clinic Journal of Medicine* are those of the authors and not necessarily of the Cleveland Clinic Foundation, its Board of Trustees, or Stryker Orthopaedics. They do not necessarily represent formal practice guidelines in effect at Cleveland Clinic.

The *Cleveland Clinic Journal of Medicine* [ISSN 0891-1150 (print), ISSN 1939-2869 (online)] is published 12 times yearly by the Cleveland Clinic Foundation.

Subscription rates: U.S. and possessions: personal $115; institutional $143; single copy/back issue $20. Foreign: $160; single copy/back issue $20. Institutional (multiple-reader) rate applies to libraries, schools, hospitals, and federal, commercial, and private organizations. Individual subscriptions must be in the names of and paid by individuals.

Postmaster address changes: *Cleveland Clinic Journal of Medicine*, NA32, 9500 Euclid Avenue, Cleveland, OH 44195. Subscription orders, editorial, reprint, and production offices (same address): 216-444-2661 (phone); 216-444-9385 (fax); ccjm@ccf.org (e-mail); www.ccjm.org (Web).

Printed in USA.