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Local Therapies for Glioma *Present Status And Future Developments*

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Local Therapies for Glioma *Present Status And Future Developments.*

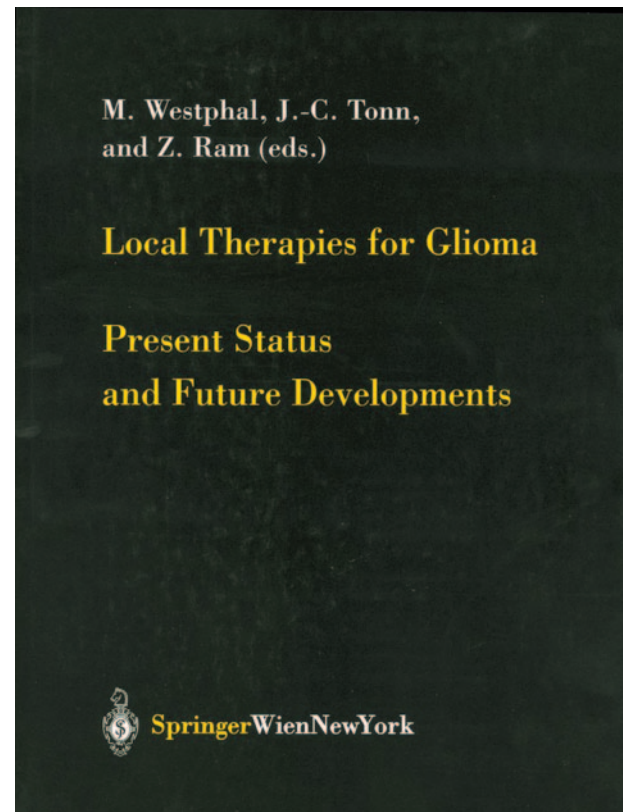
M. Westphal, J.-C. Tonn, and Z. Ram, eds. New York: Springer-Verlag/Wien; 2003. 181 pages, 58 illustrations

The treatment of gliomas, especially high grade gliomas, has not been very rewarding in the past. This has spurred intense efforts to better understand and treat these tumors in an effort to improve outcome.

This volume is a compendium of discussions by mostly European, multinational contributors. There are several discussions that may be of interest to neuroradiologists but only two that are of direct interest. The lead-off discussion is about intraoperative MR imaging. It includes a comparison of the GE system with a system developed in Israel that employs a permanent 0.12T magnet and delivers inferior images to the GE unit with a more limited FOV, but it allows for the use of regular surgical tools and probably provides greater operative accessibility to the patient. The second presentation of direct interest to neuroradiologists is a discussion of postoperative imaging after brain tumor resection. This is an important discussion because prognosis after resection of brain tumor is influenced not only by the histologic findings but also the adequacy of resection. However, I found nothing new in this discussion, which will be a nice review but will add nothing to current practice. There are a number of presentations of peripheral interest to the neuroradiologist, especially those papers dealing with image-guided neurosurgery and stereotactic resection techniques and intraoperative MR imaging in glioma surgery.

In general, the organization of the volume contributes to its limited appeal to neuroradiologists. The initial 10% (approximately) of the book is devoted mainly to surgical techniques, in which the papers of direct interest to neuroradiologists are embedded. There are three papers devoted to physical treatment of gliomas: one deals with external beam and conformal radiation therapy in the management of these tumors, a second discusses interstitial stereotactic radiosurgery implanting radioactive material into gliomas, and a third deals with the potential use of high intensity focused sonography with MR imaging thermometry for thermotherapy. Only the latter paper reflects anything remotely new.

There are interesting discussions about stereotactic implant of drug-releasing micropheres for therapy and implantable intracavitary (at surgery) chemotherapy with gliadel wafers. However, most of the papers deal with potential emerging therapeutic technologies that range from intralesional radioimmunotherapy to the use of oncolytic viruses or directly injected novel cytotoxins. This section on emerging potential thera-



peutics occupies well over 50% of the book and these are the only papers that are not passé.

I feel that this volume would have been better served if there had been a full discussion of the imaging problems encountered after treatment by radiation or chemotherapy. The differentiation of radiation necrosis from tumor recurrence still remains a significant challenge despite MR spectroscopy and PET scanning.

There is no discussion of the use of stereotactic radiosurgery to treat gliomas locally, either by Gamma Knife or Linac-based techniques or by the newly emerging Cyberknife technology.

Overall, this volume is not as complete as it could be and, by virtue of a 2003 publication date, it is outdated for several areas at time of publication. I believe that this book may be of interest to research clinicians and neuro-oncologists who have an interest in novel local therapies for gliomas. However, it will be of only limited interest for the neuroradiologist or radiation oncologist.