Advances in Regional Cancer Therapy

Association for Regional Tumor Therapy

Proceedings of the III International Conference on Advances in Regional Cancer Therapy (ICRCT), Ulm (FRG), September 8-11, 1987

Advances in Regional Cancer Therapy

Editors
J. Kreidler, K. H. Link, Ulm; K. R. Aigner, Trostberg

52 figures and 65 tables, 1988

Basel • München • Paris • London • New York • New Delhi • Singapore • Tokyo • Sydney

Library of Congress Cataloging-in-Publication Data
International Conference on Advances in Regional Cancer Therapy (3rd: 1987: Ulm, Germany)
Advances in regional cancer therapy: proceedings of the III International Conference on Advances in Regional Cancer Therapy (ICRCT), Ulm (FRG), September 8–11, 1987 / Editors: J. Kreidler, K. H. Link, K. R. Aigner.
Includes bibliographies.
[DNLM: 1. Neoplasms - drug therapy - congresses. 2. Perfusion, Regional - congresses. QZ 267 1604 a
1987].
RC271.C5I545 1987
616.99'4061 – dcl9
DNLM/DLC for Library of Congress
ISBN 3-8055-4842-7

Bibliographic Indices
This publication is listed in bibliographic services, including Current Contents® and Index Medicus.

Drug Dosage
The authors and the publisher have exerted every effort to ensure that drug selection and dosage set forth in this text are in accord with current recommendations and practice at the time of publication.
However, in view of ongoing research, changes in government regulations, and the constant flow of information relating to drug therapy and drug reactions, the reader is urged to check the package insert for each drug for any change in indications and dosage and for added warnings and precautions. This is particularly important when the recommended agent is a new and/or infrequently employed drug.

All rights reserved.
No part of this publication may be translated into other languages, reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, microcopying, or by any information storage and retrieval system, without permission in writing from the publisher.

© Copyright 1988 by S. Karger GmbH, P.O. Box, D-8034 Germering/Munchen and S. Karger AG, P.O. Box, CH-4009 Basel
Printed in Germany by Gebr. Parcus KG, D-8000 München
ISBN 3-8055-4842-7

Contents

Preface.......................................................... VII

Basic Sciences /Innovations

Stephens, F. O.; Waugh, R. C; Prest, G. (Sydney): Surgical or Radiological Placement of Cannulas for Delivery of Intraarterial Chemotherapy..... 1
Davidson, T.; Wallace, J. (London); Starkhammar, H.; Hakansson, L. (Linkoping): Enhanced Tumour Targeting with Sequential Administration of Small and Large Degradable Starch Microspheres................... 40
Embolisation of Hepatic Malignancies with Degradable Starch Microspheres (DSM): Technique and Results..................................... 49

Liver Tumors

Lehner, B.; Bubeck, B.; Kretzschmar, U.; Schlag, P. (Heidelberg): Do Results of Liver Angiography and Liver Perfusion Scintigraphy Correlate with Response to HAI Chemotherapy........................................... 73

Contents VI

Link, K. H. (Ulm): Drug Testing in Regional Chemotherapy of Liver Metastases 79
Shafir, M.; Jones, R.; Roboz, J.; Jaramillo, S. (New York, N. Y.): Can Colon Liver Metastases be Treated by High-Dose Intraperitoneal 5-Fluorouracil?..... 100

Head/Neck - Brain Tumors

Auersperg, M.; Pompe, F.; Bergant, D.; Zorc-Pleskovic, R. (Ljubljana): Cis-Platinum-Based Combined Intraarterial Chemotherapy of Head and Neck Tumors 105
Bilder, J. (Brno): Effective Chemoinduction in Orofacial Oncotherapy...... 116
Kreidler, J.; Hemmer, J.; Haase, St. (Ulm): Monitoring of Regional Intraarterial Chemotherapy of Oral Carcinoma by Flow Cytometry .......... 122
Sheen, M. C. (Kaohsiung): Intraarterial Infusion Chemotherapy for Advanced Head and Neck Cancer ............................................. 144
Nemeth, Gy, Naszály, A.; Bánthidy, F. (Budapest): Telecobalt Irradiation of Glottic Carcinoma of the Larynx After CO2 Laser Surgery............ 151
Schönmayr, R.; Tonn, J. C. (Giessen); Link, K. H. (Ulm); Kraemer, H. P. (Marburg/Lahn): Chemosensitivity of Malignant Human Brain Tumors in vitro 157
Papavero, L. (Homburg/Saar); Roosen, N.; Kiwit, J. W. C. (Düsseldorf); Jaksche, H. (Homburg/Saar); Schirmer, M.; Lins, E.; Bock, W. J. (Düsseldorf); Loew, F. (Homburg/Saar): The Role of Regional Chemotherapy with ACNU in the Treatment of Anaplastic Gliomas.............................................. 167
Ernst, H.; Sparenberg, A. (Berlin): Fractionated Iridium Afterloading Therapy in Brain Tumors.................................................... 174

Intracavitary Tumors

Hoffmann, W.; Migeod, F; Kress, M.; Seeber, S. (Leverkusen): Results of Intracavitary Chemotherapy with Mitoxantrone.......................... 180
Musch, E.; Loos, U.; Mackes, K. G. (Bonn); Seitzer, D. (Münster); Werner, A. (Bonn); Peiss, J. (Aachen); Bode, U. (Bonn): Intrapleural Mitoxantrone in the Treatment of Malignant Pleural Effusion......................... 184
Kubota, Y; Hosaka, M. (Yokohama): Preoperative Doxorubicin Intravesical Chemotherapy in Recurrent Superficial Bladder Cancer.............. 190

Extremity Tumors


Contents VII

Loos, U; Musch, L. (Bonn); Rauschecker, H. (Göttingen): Kinetics of Melphalan in Hyperthermic Isolation Perfusion of the Limbs...................... 221

Preface

For about 10 years, research into regional chemotherapy for all regions and organs of the body has received a fresh impetus. This development was the result of greater experience in the field of Head/Neck and Extremity Tumors. After World War II Klopp, Sullivan and Espiner in England treated head and neck tumors by intraarterial infusion of N-Lost and Methotrexate. In the USA, Krementz, the father of extremity perfusion, began treating his first cases with this method in 1965. Since 1980, simultaneously in Europe and the USA, intraarterial
liver infusion and perfusion with cytostatic drugs has been introduced in the treatment of metastatic colon cancer. Aigner in West Germany and Kemeny and Patt in the USA provided valuable innovations in the promotion of regional treatment modalities.

In 1982, clinicians and basic science researchers met for the first time for an International Conference on Advances in Regional Cancer Therapy (ICRCT 82) in Giessen, West Germany, to exchange experiences and discuss the status of knowledge in this field. Three years later the ICRCT 85 took place, again in Giessen, where it was noted that great progress had been made regarding standard therapy schemes.

In the same year in West Germany, a group of clinicians and researchers in the basic sciences united to form a working party on regional tumor therapy, the Arbeitsgemeinschaft für Regionale Tumorthherapie (ART)’ with the aim of promoting regional tumor therapy by collaborating on prospective therapy trials and organizing workshops and scientific meetings.

Pursuing this aim, the ICRCT series was continued in Ulm on September 8-11, 1987 with some 400 participants from all over the world. Around 150 lectures and 120 posters were presented by scientists from 24 countries, from Australia, the Far East, Europe and America.

In sessions on (1) Basic Sciences, (2) Innovative Approaches, (3) Tumor Targeting, (4) Liver Tumors, (5) Head/Neck-Brain Tumors, (6) Radiation and Laser, (7) Intracavitary Instillation, and (8) Extremity Tumors, a successful scientific exchange took place, within the framework of an enjoyable social program.

This book contains, as a summary of this meeting, the most important contributions presented at this conference. It represents the present knowledge on the topics included in the main sessions, which cover all fields of regional therapy and combination therapy.

I should like to thank all those who have contributed to this book, especially all the authors and their co-workers, my secretaries, Mrs. Mutschler and Mrs. Krieger, as well as my co-editors for their indefatigable support. Thanks are also due to Karger, the publishers, for their excellent supervision of the production of the book.

Ulm, July 1988 J. Kreidler
for the editors