

Contents

Part I Radiobiology and Physics of Image-Guided Brachytherapy

- | | |
|---|-----------|
| 1 Radiobiology of Brachytherapy..... | 3 |
| Xiao Zhao and Andrew T. Vaughan | |
| 2 General Physics Principles in Brachytherapy | 19 |
| Sang-June Park and David H. Thomas | |
| 3 Treatment Delivery Technology
for Brachytherapy..... | 41 |
| J. Adam M. Cunha and Dae Yup Han | |
| 4 Image Guidance Systems for Brachytherapy | 69 |
| Laura Padilla and Dorin A. Todor | |
| 5 Quality Assurance in Brachytherapy | 99 |
| Bruce Libby and Taeho Kim | |

Part II Clinical Applications of Image-Guided Brachytherapy

- | | |
|--|------------|
| 6 Anesthesia and Procedural Care
for Brachytherapy..... | 119 |
| Brandon A. Dyer, Alison Nielsen,
Mitchell Kamrava, and Jyoti Mayadev | |
| 7 Breast Brachytherapy and Clinical Appendix..... | 145 |
| Kara D. Romano, Daniel M. Trifiletti,
Bruce Libby, and Timothy N. Showalter | |

8	Eye Plaque Brachytherapy	197
	Tijana Skrepnik, John Gloss, Cameron Javid, and Baldassarre Stea	
9	Head and Neck Brachytherapy	219
	D. Jeffrey Demanes	
10	Gastrointestinal Brachytherapy:	
	Esophageal Cancer	273
	Supriya K. Jain and Karyn A. Goodman	
11	Gastrointestinal Brachytherapy:	
	Anal and Rectal Cancer	289
	Supriya K. Jain and Karyn A. Goodman	
12	MRI Image-Guided Low-Dose Rate Brachytherapy	
	for Prostate Cancer	319
	Amy C. Moreno, Rajat J. Kudchadker, Jihong Wang, and Steven J. Frank	
13	High-Dose Rate Brachytherapy	
	for Prostate Cancer and Clinical Appendix	345
	Yao Yu, I-Chow Hsu, Mitchell Kamrava, and Albert J. Chang	
14	Gynecologic Cancer and High-Dose Rate	
	Brachytherapy: Cervical, Endometrial,	
	Vaginal, Vulva and Clinical Appendix	399
	Jyoti Mayadev and Sushil Beriwal	
15	Skin Brachytherapy	457
	Anna Likhacheva	
16	Sarcoma and High-Dose Rate Brachytherapy:	
	Extremity Soft Tissue Sarcoma	481
	Kunal Saigal and Matthew Biagioli	
17	Image-Guided BrachyAblation (IGBA)	
	for Liver Metastases and Primary Liver Cancers	505
	Shyamal Patel, Jens Ricke, and Mitchell Kamrava	

18 Central Nervous System Brachytherapy.....	539
A. Gabriella Wernicke, Shoshana Taube, Andrew W. Smith, and Bhupesh Parashar	
19 Lung Brachytherapy.....	557
Justin Mann, Alex Herskovic, Jonathan Chen, A. Gabriella Wernicke, and Bhupesh Parashar	
Appendix A: Consent Forms.....	583
Appendix B: Brachytherapy Quality Assurance Checklists.....	595
Index.....	611

<http://www.springer.com/978-3-319-44825-1>

Handbook of Image-Guided Brachytherapy

Mayadev, J.; Benedict, S.H.; Kamrava, M. (Eds.)

2017, XVII, 622 p. 209 illus., 151 illus. in color.,

Softcover

ISBN: 978-3-319-44825-1