Thyroid Cancer

A Guide for Patients

2nd Edition
2010
Keystone Press

Editors

Douglas Van Nostrand, M.D., F.A.C.P., F.A.C.N.M.
Director, Division of Nuclear Medicine, Washington Hospital Center
Professor of Medicine, Georgetown University School of Medicine

Leonard Wartofsky, M.D., M.P.H., M.A.C.P.
Chair, Department of Medicine, Washington Hospital Center
Professor of Medicine, Georgetown University School of Medicine
Professor of Medicine, Uniformed Services University of the Health Sciences

Gary Bloom
Executive Director, Co-Founder, and former Board Chair
ThyCa: Thyroid Cancer Survivors’ Association, Inc.

Kanchan P. Kulkarni, M.B.B.S.
Director, Nuclear Endocrinology, Division of Nuclear Medicine
Washington Hospital Center
Assistant Professor, Georgetown University School of Medicine

40 Authors, 434 Pages

Table of Contents Below
Thyroid Cancer: A Guide for Patients

Table of Contents

Contributors ................................................................. ix
Foreword for Second Edition ........................................ xvi
Preface for Second Edition .......................................... xx
Acknowledgments of Second Edition ............................. xxi
Foreword for First Edition ........................................... xxii
Preface for First Edition .............................................. xxiv
Acknowledgements of First Edition ............................... xxvii

Chapter 1: From “Nodule to Diagnosis to Therapy to Follow-Up” .......... 1
  Douglas Van Nostrand, M.D. and Leonard Wartofsky, M.D.

SECTION I: THE BASICS

Chapter 2: The Thyroid Gland: The Basics ............................... 5
  Leonard Wartofsky, M.D.

Chapter 3: Thyroid Hormone Measurements in Blood: Thyroxine [T4],
  Triiodothyronine [T], Thyroid Stimulating Hormone[TSH], and Thyroglobulin [Tg] ...... 15
  Leonard Wartofsky, M.D.

Chapter 4: Radiation, Carcinogens, Chernobyl, Genes, and Thyroid Cancer ..... 19
  James John Figge, M.D.

Chapter 5: Molecular Markers: What are they and Can They Help? .......... 27
  Victor Bernet, M.D.

Chapter 6: The Role of Various Physicians, Specialists, and Second Opinions .... 35
  Kenneth D. Burman, M.D.

SECTION II: FROM NODULE TO SURGERY

Chapter 7: Thyroid Nodules .................................................. 39
  Leonard Wartofsky, M.D.

Chapter 8: Fine Needle Aspiration ........................................... 57
  Yolanda C. Oertel, M.D.
Chapter 9: Surgery in Thyroid Cancer
Lisa Boyle, M.D.

SECTION III: WELL-DIFFERENTIATED THYROID CANCER

Chapter 10: Well-Differentiated Thyroid Cancer: Staging and Prognosis
Leonard Wartofsky, M.D.

Chapter 11: Variants of Papillary Thyroid Carcinoma (Tall Cell, Insular, Columnar, Hürthle Cell, etc)
Victor Bernet, M.D.

Chapter 12: Thyroid Cancer in the Child and Adolescent
Andrew J. Bauer, M.D.
Gary L. Francis, M.D.

Chapter 13: Thyroid Cancer In Pregnancy
Henry Burch, M.D.

Chapter 14: Low Iodine Diet
Kenneth D. Burman, M.D.

Chapter 15: Withdrawal of Thyroid Hormones
Kenneth D. Burman, M.D.

Chapter 16: Thyrogen®
Leonard Wartofsky, M.D.

Chapter 17: Radioiodine Whole Body Scanning, Part I: Overview and the Different Types of Scans for Well-differentiated Thyroid Cancer
Douglas Van Nostrand, M.D.

Chapter 18: radioiodine Whole Body Scanning, Part II: Preparation, What to Expect, and Radiation Safety Precautions and Well-Differentiated Thyroid Cancer
Douglas Van Nostrand, M.D.

Chapter 19: Dosimetry
Frank Atkins, Ph.D.

Chapter 20: Additional Diagnostic Imaging Studies
James Jelinek, M.D.
Douglas Van Nostrand, M.D.
Alexander Mark, M.D.
Robert Bridwell, M.D.
Lalitha Shankar, M.D.
Chapter 21: “PET Imaging in Thyroid Cancer” ........................................... 189
Kanchan Kulkarni, M.B.B.S.,
Homeira Zahiri, M.D.,
Douglas Van Nostrand, M.D.

Chapter 22: 124I: A Future Radioiodine ............................................... 197
Douglas Van Nostrand, M.D.

Chapter 23: 131I Ablation and Treatment For Well-Differentiated Thyroid Cancer
.............................................................................................................. 201
Douglas Van Nostrand, M.D.

Chapter 24: Selecting the Dosage of 131I for Ablation or Treatment .......... 219
Douglas Van Nostrand, M.D.

Chapter 25: Thyrogen for Preparation for 131I Ablation and Treatment ...... 225
Leonard Wartofsky, M.D.

Chapter 26: Side Effects of 131I .............................................................. 231
Douglas Van Nostrand, M.D.

Chapter 27: Radioactivity and Radiation ................................................. 249
John E. Glenn, Ph.D.

Chapter 28: Radiation Safety Precautions During Your Hospital Stay and at Home .......................................................... 255
John E. Glenn, Ph.D.

Chapter 29: Hormone Preparations Including “Natural Remedies.”
Types, Advantages, Disadvantages, and Caveats ................................. 261
James V. Hennessey, M.D.

Chapter 30: Management of Persistent Elevated Thyroglobulin Blood Levels and Negative Radioiodine Scans ................................. 269
Leonard Wartofsky, M.D.

Chapter 31: Re-Differentiation of Well-Differentiated Thyroid Cancer
With Negative radioiodine Scans .......................................................... 275
Shyam Chennupati, M.B.B.S.
Douglas Van Nostrand, M.D.

Chapter 32: Re-Operative Thyroid Surgery ............................................ 277
Nancy Carroll, M.D.

Chapter 33: Management of Bone Metastasis ........................................ 281
Jason A. Wexler, M.D.
Chapter 34: External Beam Radiation Therapy ......................... 285
James D. Brierley MBBS

Chapter 35: Radiofrequency Ablation ................................. 303
Howard Richard, M.D.

Chapter 36: Additional Modalities of Treatment for Well-Differentiated Thyroid Cancer and Future Directions ........................................ 309
Matthew D. Ringel, M.D.

SECTION IV: MEDULLARY THYROID CANCER

Chapter 37: Medullary Thyroid Carcinoma .......................... 321
Yasser H. Ousman, M.D.

SECTION V: ANAPLASTIC THYROID CANCER

Chapter 38: Anaplastic Thyroid Carcinoma .......................... 329
Nikolaos Stathatos, M.D.
Leonard Wartofsky, M.D.

SECTION VI: PATIENT COMMENTARIES

Chapter 39: Living with Thyroid Cancer: Patient Commentaries .......................... 337
Ron Sall, C.P.A
Dianne Dodd, Ph.D.
Joan Shey
Diane Patching
Beth Scott
Samuel Chatham, M.D.
Jeanne F. Allegra, Ph.D., Psychologist
Stephen Peterson, M.D., Psychiatrist

SECTION VII: RESEARCH STUDIES

Chapter 40: Participation in Research Studies ........................ 373
Shari Gooden, C.R.A
SECTION VIII: APPENDICES

Appendix A: Frequently Asked Questions About Well-Differentiated Thyroid Cancer ................................................................. 379

Appendix B: Glossary ................................................................................. 391

Appendix C: Additional Sources of Information ........................................... 401
Gary Bloom

Appendix D: Books and Manuals ................................................................. 409

Appendix E: Example of Form for Potential “Early Release” from Hospital ...... 413

Appendix F: Patient Bill of Rights and Responsibilities ............................... 417

Index ........................................................................................................ 421

###