An Overview of the Management of Thyroid Cancer

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Introduction

The management of thyroid cancer has changed substantially over the past several decades, largely as a result of our expanding knowledge of this unique group of tumors and the availability of newer diagnostic and therapeutic modalities. Patients with thyroid cancer require the assistance of a diversified group of healthcare providers during literally every phase of their care, from the time of diagnosis to the extended period of follow-up. This book is a statement of the breadth of the collective knowledge and skills that are required to properly assist patients with these tumors. Our goal is to summarize, in a practical way, how patients with thyroid cancer are optimally managed and how the fabric of their care is carefully managed and how the fabric of their care is carefully woven by a group of providers with specialized skills, each of whom adds a unique part to the patient's overall care. Without this broad multidisciplinary approach, gaps may occur at every turn in management, which may pose serious obstacles to achieving the best long-term results for our patients.

While it is true that the more differentiated forms of thyroid cancer are generally characterized by an indolent course with low morbidity and mortality and are among the most curable of cancers, patients are sometimes advised that
this is not a serious problem, which could not be more wrong. As a result of such advice, patients sometimes forgo long-term follow-up that is essential to their management. Moreover, this attitude trivializes the importance of the disease and certainly is not the view of any patient that I have ever seen. Chapter 4 is written by a patient who gives her poignant account of thyroid cancer from the perspective of someone who is living with it. She underscores the emotional impact that it has on a person and how she managed to cope with our medical system and the problems associated with her disease. Her chapter is near the front of the book to remind us all why we practice medicine.

Thyroid cancer comprises a group of tumors with strikingly different features. Papillary thyroid carcinoma (PTC), follicular thyroid carcinoma (FTC), and Hürthle cell carcinoma (HTC), tumors of the thyroid follicular cell often collectively referred to as differentiated thyroid cancer (DTC), have unique characteristics that become blurred when classified together as DTC. While their management is similar, important diagnostic, therapeutic, and prognostic differences exist among the three tumor types. Two other forms of thyroid cancer also pose unique problems. They are medullary thyroid carcinoma (MTC), a tumor of the thyroid C cell that secretes calcitonin, and anaplastic thyroid carcinoma (ATC), which often arises from benign thyroid tumors or DTC. This chapter will provide a broad overview of the management of thyroid cancer, which is discussed in considerably more detail in the following chapters.

**Incidence and Mortality Rates**

**Incidence Rates**

**Contemporary Rates**

An estimated 122,803 cases of thyroid cancer occurred around the world in the year 2000, causing an estimated 8,570 deaths [1]. Yet thyroid cancer is relatively uncommon, striking only about 1.18 people per 100,000 persons worldwide, with a somewhat higher incidence in Europe and North America [1]. Thyroid cancer accounted for only about 1.6% of all new cancer cases in the USA during 2003 [2], but it strikes at all ages. Its incidence rate in women is about threefold that in men, peaking in midlife in women and more than two decades later in men (Figure 1.1). In the first decade of life its incidence is the same in boys and girls.