The Management of Differentiated Thyroid Carcinoma: Multidisciplinary Decisions

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With the increase of physical screening and health awareness in the public, the incidence of well differentiated thyroid carcinoma (DTC) is increasing. However, owing to the early diagnosis and appropriate treatment, the recurrence and mortality rates of patients with DTC have decreased in the past decades. Controversy remains because of the unique biological behavior of DTC, this needs a multidisciplinary team to provide a rational, patient focused management protocol including initial surgery, adjuvant therapies, subsequently thyrotropin suppression, and long-term follow-up and surveillance. In Europe and northern America, consensus reports (guidelines) in the clinical management of DTC were provided by organizations of related disciplines comprised surgeon, endocrinologist, oncologist and nuclear medicine physician with the support from pathologist, biochemist, radiologist and special nurse to deal controversial issues in this aspect. The guidelines help patients understand WDT well, be treated appropriately, get better care and life quality and subsequently improve survival. Taking advantage of previous reports and available guidelines, we summarized data in incidence, recurrence and distal metastasis, and regimens in appropriate treatment of patients with DTC.

Key words: differentiated thyroid carcinoma, multidisciplinary decisions, guideline


Introduction

While our understanding of differentiated thyroid carcinoma (DTC) has improved considerably with well recognized prognostic factors and risk analyses, the management of DTC continues to be a subject of major controversy for endocrinologists, surgeons and nuclear medicine physicians. It sometimes is named “a benign malignancy” because of its unique biological behavior. Its low incidence, prolong clinical course, geographical and cell histological variations in conjunction with the paucity of randomized trials raise the difficulty to make a worldwide consensus in the management of such patients.

Radioiodine-131 (¹³I) is thought to be effective in the treatment of patients with DTC after surgical management and in the localization of remnant, tumor recurrence and metastases. On the other hand, measurements of serum thyroglobulin (Tg, exclusively produced by normal thyroid and differentiated thyroid tumors of follicular origin) have become a recognized means in the follow-up of patients treated for DTC [1] (from the NACB thyroid monograph,