Patients differs from that in adults with respect to its presentation and outcome. Although pediatric patients with thyroid carcinoma tend to present with disease at a more advanced stage than adults, namely a higher incidence of lymph nodes and pulmonary metastases, the prognosis is better for them.\(^4,5\) Guidelines with regards to optimal management of DTC in children and adolescents are based primarily on the experience of a few specialists of tertiary care academic Institutions.\(^6\) Hence the description of additional cohorts of pediatric DTC patients is of intrinsic value. In this communication, we present our data on 23 children and adolescents with thyroid carcinoma. The study is retrospective and includes mode of presentation, clinical course, and long-term outcome of therapy. It is important to underline that this study refers to a genetically relatively homogeneous population. All patients were born in Northern Greece and the exposure of the presented cases to environmental iodine loads was most probably similar. Data were analyzed in an anonymized fashion. No medullary thyroid carcinoma cases are included in this study.

**SUBJECTS AND METHODS**

Twenty-three children and adolescents (15 females and 8 males) aged 8 to 20 (mean 15.9±3.3) years were treated for differentiated thyroid carcinoma (DTC) in the Theagenion Cancer Hospital from 1987 to 2004. The main presenting symptoms were a solitary thyroid nodule in 12 and multinodular goiter in 7. Palpable cervical lymph nodes were present in 14 of them, and a palpable lateral cervical mass with normal thyroid in 4 patients. No patient had received head or neck external radiation therapy. One patient had a family history of papillary thyroid carcinoma. Fine needle aspiration biopsy (FNAB) was performed in 4 patients and led to the diagnosis of thyroid carcinoma. In 2 patients the diagnosis was established after biopsy of an enlarged lymph node, and in 17 the diagnosis was established by histology after thyroidectomy.

Total thyroidectomy was performed in 21, with unilateral cervical lymph node dissection in 18 patients, and lymph node dissection of the upper mediastinum in 2 of them. Subtotal thyroidectomy was performed in 2 patients carrying a small cold node (0.5 and 0.9cm in diameter, respectively). After surgery one patient presented transient hypoparathyroidism, but no patient presented recurrent laryngeal nerve damage. Postoperatively, ablation therapy with 80-100 mCi of radioactive \(^{131}\)I was given in 21/23 patients in order to eradicate any remaining normal or malignant thyroid tissue. Ablation therapy was not given in the 2 patients with subtotal thyroidectomy. Thyroid hormone therapy was applied in all patients.

A whole body scan (WBS) was performed 4-7 days after ablation therapy. TSH and thyroglobulin (Tg) measurement in the hypothyroid condition was carried out in all patients by IRMA methods (Brahms and Schering, respectively).

**RESULTS**

Histology revealed papillary thyroid carcinoma (PTC) in 21/23 patients (91.3%), with pure papillary type in 13 (61.9%) and papillary TC-follicular variant in 8 (38.1%). In the remaining 2 patients follicular carcinoma and insular carcinoma, respectively were detected (Table 1). Tumor size ranged from 0.23 to 5 cm (maximum diameter); 9 children had tumors measuring <1.5 cm. Multiple tumor foci of the papillary type were detected in 11 patients.