Preface

Thyroid nodules are a common clinical finding in the population, especially in women. The prevalence of palpable nodules is about 5%. At autopsy or ultrasound (US) examination thyroid lesions are found in up to 50% of the adult population. Only about 10% of palpable thyroid nodules are malignant. In Norway there are about 220 new thyroid carcinomas each year. This means that more than 2000 patients have to be examined to find these carcinomas. Due to increased use of computed tomography, magnetic resonance, positron emmision tomography and US examination of the neck for other reasons, more palpable and nonpalpable thyroid lesions, so-called "incidentalomas" are found. Many of these lesions will need further examination.

Until a few years ago, thyroid lesions were resected with no preoperative diagnosis, and as a result, a lot of benign thyroid nodules were removed unnecessarily. In addition, many malignant tumors were not radically removed at primary surgery and the need for regional lymph node resections were not taken into consideration. For many years there has been controversy about the most cost-effective approach in the diagnostic evaluation and treatment of thyroid nodules.

During the past 5 years, the management of patients with thyroid nodules and thyroid carcinoma has changed. In 2006 the American Thyroid Association announced their Management Guidelines for patients with Thyroid Nodules and Differentiated Thyroid Carcinoma [1], and the European Thyroid Association released their European Consensus for the Management of Patients with Differentiated Thyroid Carcinoma of the Follicular Epithelium the same year [2]. In March 2007 the Norwegian guidelines were published [3].

The essential aim of this atlas is to give physicians performing US examinations better knowledge in differentiating between benign, suspicious, and malignant thyroid lesions, and between normal and pathologic neck lymph nodes. There are some features that are typical for one entity, but there are also many overlapping features among the different lesions, which make it impossible to assess the correct diagnosis in every case. The presentation of pathology images may help the cytopathologist/histopathologist in their evaluation of the different specimens, and may also be of interest to the radiologist. A better understanding of the pathology may help the radiologist develop his or her skills. The goal for the patient and the physician should be to prevent surgeries for clinically insignificant benign nodular disease and to perform radical resections of thyroid carcinomas and metastases when needed.

Arne Heilo, MD, Eva Sigstad, MD,
and Krystyna Grøholt, MD