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## Preface

This textbook is devoted to comprehensive portrayal of high resolution ultrasound of the thyroid and parathyroid glands. This goal cannot be accomplished without addressing the entire cervical lymph node basins as well as other clinical conditions and anatomical areas which may be misinterpreted as being of thyroid origin. Ultrasound technology is not specific to any single medical discipline and as such the authors represent an objective merger of both radiologic and clinical specialties devoted to study of this fascinating endocrine region. In fact, the text attempts to extend beyond the simple dry presentation of groups of images to apply sufficient clinical information concerning function of the thyroid and parathyroid glands in a variety of disease states. The reader may recognize some redundancy in discussion of ultrasound physics, scanning techniques, and application of fine needle aspiration. By design, this concept emphasizes certain important details and illustrates that there are multiple ways to apply variations in technology to arrive at the same endpoint. The images included in the text are a result of decades of experience with head and neck imaging and frequently both CT and MRI are included in parallel with ultrasound to enhance the presentation. The one process which cannot be demonstrated in a written text is dynamic cine loop imaging. Thus, an on-line link to a variety of carefully selected cine loops is included as an adjunct to provide the reader with the most comprehensive understanding of this technology and its relevance to radiologists, endocrinologists, endocrine, and head and neck surgeons. In fact, the cine loop may be the most important tool to adequately portray the pathology of interest and to allow sharing of imagery with other clinicians in a simple and brief overview. This concept is analogous to the realm of photography where black and white, color, and movie renditions all have a creative role in properly capturing a scene.

In discussion of the history of ultrasound and its modern day application, several American societies which have a vested interest in clinical ultrasound of the thyroid and parathyroid glands are mentioned to barely scratch the surface of modern day issues. It is apparent that there will be omissions from various parts of the world where ultrasound is the primary imaging tool and is performed to excellent clinical advantage. These countries from Asia, Europe, South America, Australia, and Africa each have their own specialty societies and contributions to the understanding of this marvelous imaging tool. Finally, with the advent of both changes in technology, reduction in its

market cost, and clinical relevance ultrasound has in part become an office-based procedure. This has allowed clinicians to serve their patients with efficiency and convenience and to become more involved in the direct observation of the anatomy and pathology of the condition under study. In fact, it has presented the clinician with an opportunity to better enjoy the outpatient experience since so much detailed information can be accrued simply and beautifully in the examining room. There are a few economic and political hurdles to overcome, but establishment of an office-based use of ultrasound can easily be accomplished if the commitment is present on the clinical side [1]. The authors hope that this comprehensive investigation of cervical ultrasound will both assist the clinician to better understand images of interest and develop new initiatives in its use.

## Internet Access To Cine Loops

Cine loops are dynamic movie clips which compliment the static text images and explanations. During routine ultrasound examination of the thyroid and parathyroid glands it is necessary to evaluate the entire cervical lymph node basins. In the process of this examination, salivary glands, muscles, vessels, nerves and potential congenital abnormalities may be encountered. For this reason, no discussion of the thyroid and parathyroid glands would be complete without addressing in some way these other relevant areas and structures. Although a single ultrasound image transfers some information, the cine loop is a more complete rendition of the pathologic condition under study. These dynamic movies are collated into the following categories: 1-general 2-lymph nodes 3-parathyroid glands 4-thyroid gland 5- FNA and sampling. The owner of this text will be able to access these cine loops through Springer with the following Internet link: <http://www.springerimages.com/videos/978-1-4614-0973-1>.

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## Reference

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