## ENDOSCOPIC THYROIDECTOMY VIA AN AXILLARY OR ANTERIOR CHEST APPROACH

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## INTRODUCTION

The surgical treatment of thyroid diseases typically requires a long incision in the neck that can lead to prominent scars, hypesthesia, and paresthesia, but minimally invasive procedures have recently been developed for the surgical treatment of thyroid diseases. Minimally invasive thyroid procedures can be classified into "pure" endoscopic approaches (completely closed technique) characterized by constant gas insufflation (1-3), video-assisted gasless techniques that are performed under direct and endoscopic vision (4,5), and minimally invasive "open" surgery (6,7). Each of these approaches has its own advantage in terms of cosmetic result, invasiveness, safety, and ease of use. The "pure" endoscopic approach can be subclassified into a neck approach (1,8,9), anterior chest approach (2), breast approach (10), and axillary approach (2,3). The neck approach inevitably involves skin incisions and punctures in the neck region, but it is generally the least invasive. We have developed an anterior chest wall and axillary approach that eliminates scars in the neck region and prevents some common patient complaints concerning incisions (2,3,11,12). The anterior chest and axillary procedures are performed by remote control, and the cosmetic result is excellent because the incision is made far from the neck region. In addition, the operative field is clearly visualized with a high-magnification video monitor. However, when the incision is far from the neck region, a large working space must be developed; therefore, this endoscopic approach can be more difficult and invasive than the endoscopic neck approach, resulting in a longer operating time. In this chapter, we describe the surgical technique and results of endoscopic thyroidectomy by the anterior chest wall and axillary approaches.

## INDICATIONS

The indications for endoscopic thyroidectomy include follicular tumors, oxyphilic cell tumors, microcarcinomas, and Graves' disease. The anterior chest approach is indicated for bilateral multinodular goiters, microcarcinomas, Graves' disease, and parathyroid adenomas. When a thyroid lobectomy is indicated, an axillary approach is usually employed.

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