

# Single-Incision Robotic Areolar approach thyroidectomy (SIRA): A Case Report



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## Introduction

The anterior cervical approach has been the standard procedure for thyroid surgery for over a century. However, in the past two decades, minimally invasive surgery techniques have advanced using endoscopes and robots, allowing precise surgery to be performed through small incisions. To further improve these techniques, we have performed the world's first single-incision robotic thyroidectomy using the areola approach (SIRA). This revolutionary procedure suggests that single-incision robotic thyroid surgery may be the future of minimally invasive and precise thyroid surgery.

## Case report

In March 2024, a patient with suspected right thyroid cancer underwent a Single Incision Robotic Areolar Approach Thyroidectomy (SIRA) on the both thyroid lobe. Following the surgery, the patient experienced no complications and was discharged. The pathologic report showed that the thyroid cancer was 1.7cm in size, and had clear margins. Additionally, 10 out of 10 lymph nodes were found to have cancer.

## Discussion

Robotic thyroid surgery using a single port is expected to play a crucial role in the future of endocrine surgery.

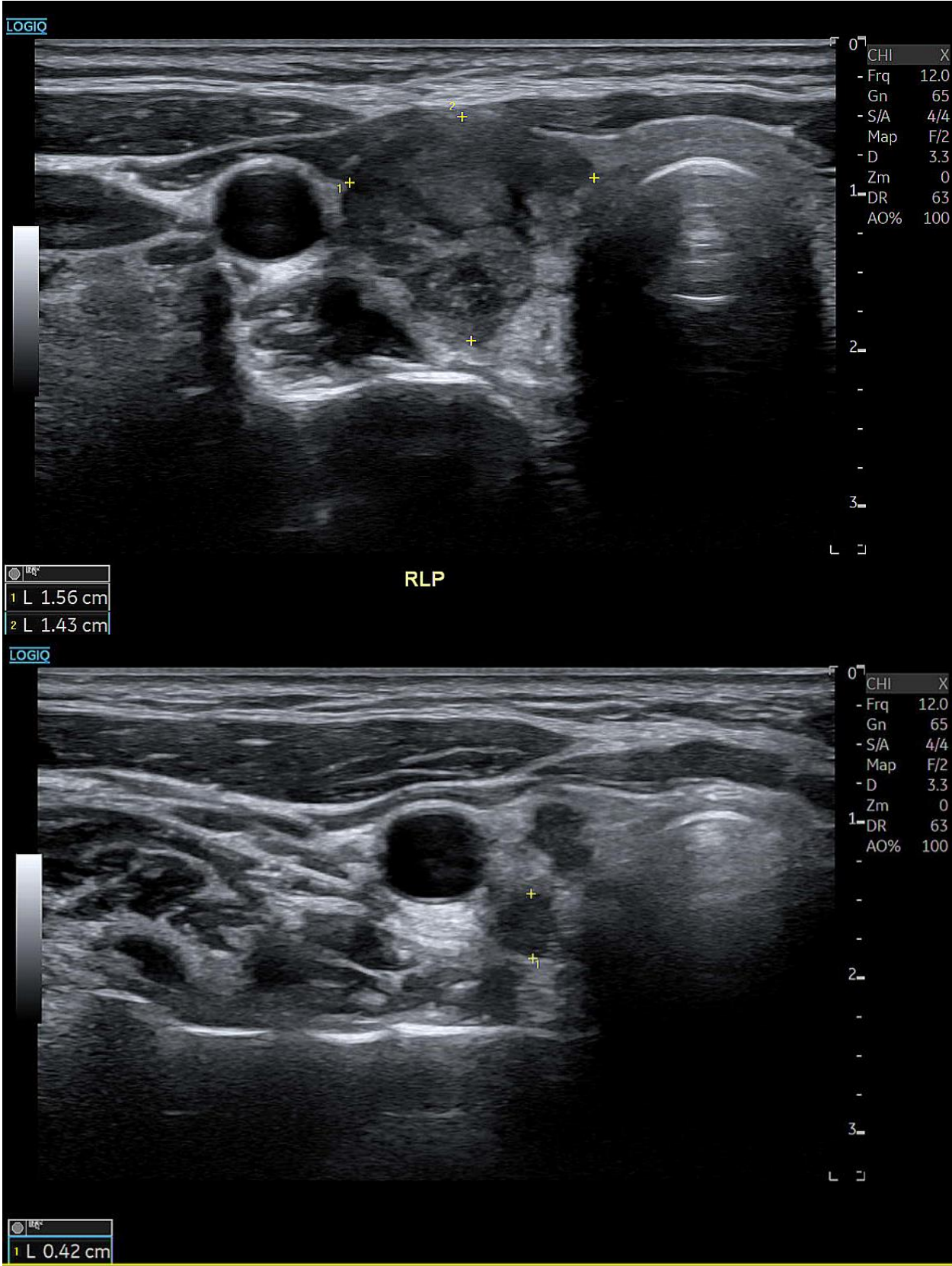


Figure 1. Pre-operative Thyroid US

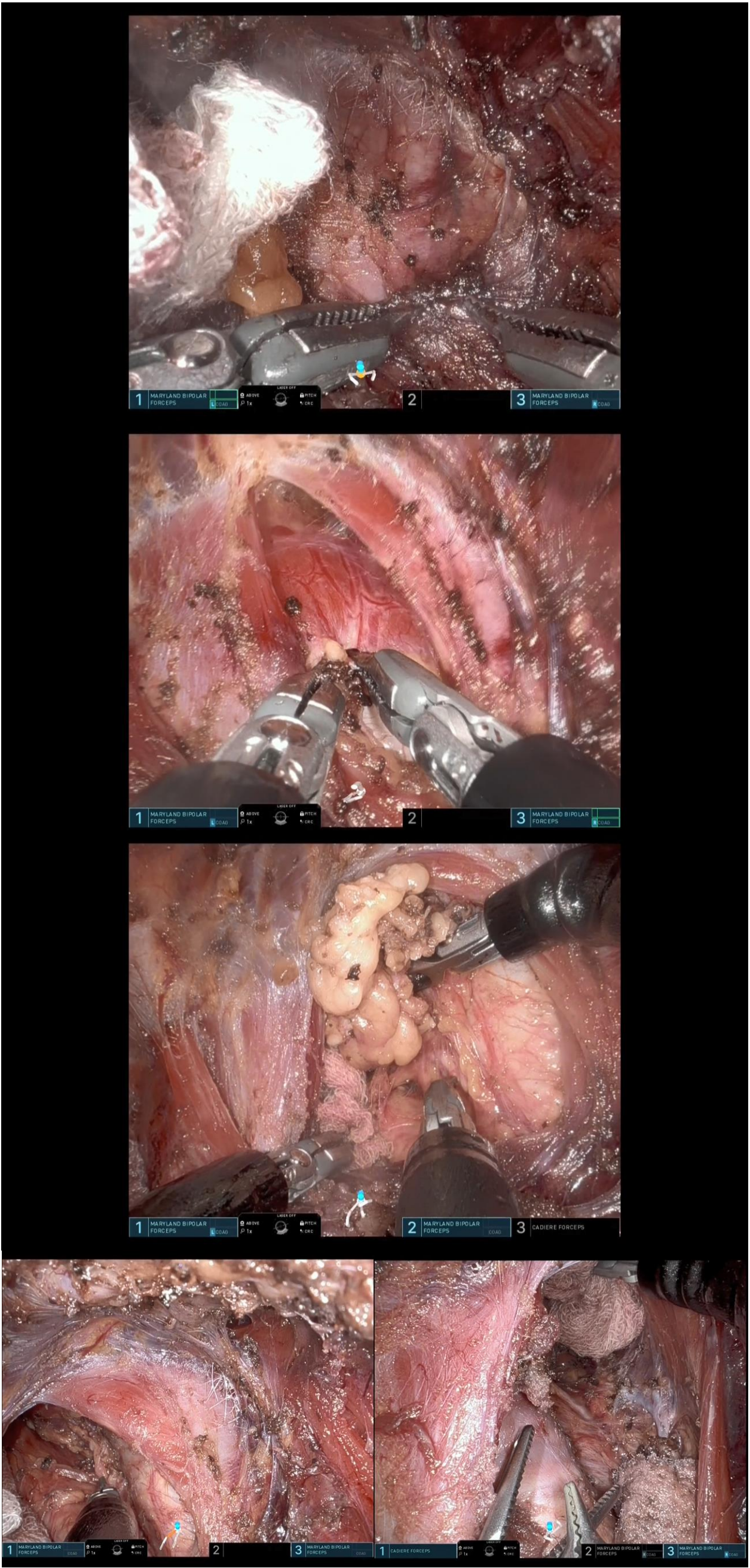


Figure 2. SIRA Procedures

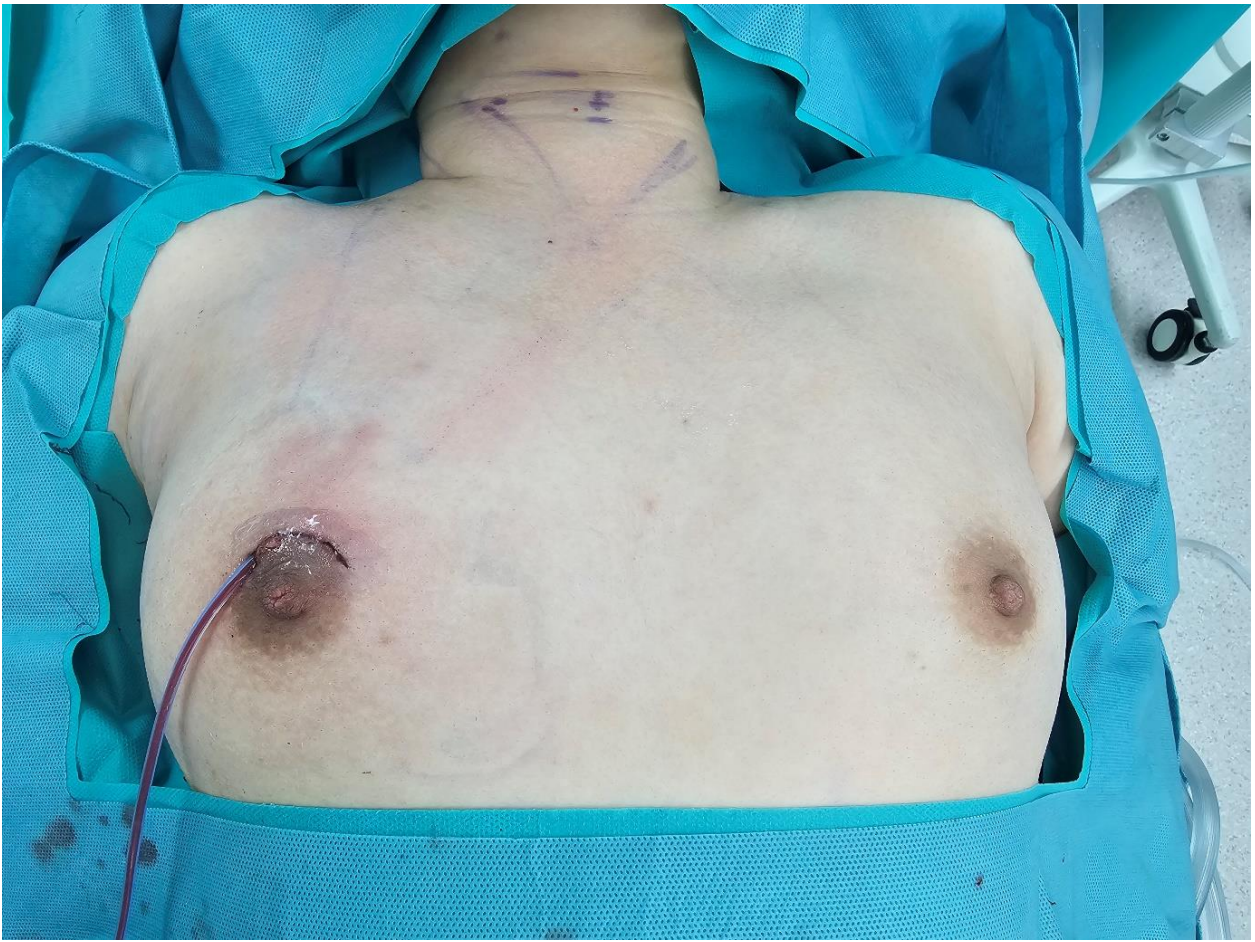


Figure 3. Immediate post-operative wound after SIRA