Needle-assisted Endoscopic Lateral Neck Dissection through Bilateral Areola Approach for Papillary Thyroid Carcinoma Patients

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INTRODUCTION

Needle-assisted endoscopic lateral neck dissection through the bilateral areola approach is a technique of selective neck dissection for levels IIA, IIB, III, IV, VB, and V lymph nodes. This technique has a cosmetic effect on patients with N1b papillary thyroid carcinoma (PTC).

CASE REPORT

In January 2016, a 26-year-old female patient was found to have PTC with right lateral cervical lymph node metastasis by fine-needle aspiration. It was found to be clinical stage I cT1bN1bM0. After computerized tomography scan and ultrasonography inspection, we decided to perform total thyroidectomy and right lateral neck dissection through the bilateral areola approach. Incisions were made at the bilateral areola with a 5-mm trocar and a 10-mm trocar was inserted into the right breast margin at the 4 o'clock position. Needle-assisted instruments directly approached the surgery region through the neck skin. We built up an operating space by the liquid–gas method with 6 mm Hg CO2 and suture suspension to maintain the spaces. Using needle-assisted instruments, the external jugular vein was separated primarily and was protected well. Then we ananotized the anterior border of the sternocleidomastoid to show the carotid triangle, including the posterior belly of the digastic muscles, hypoglossal nerve (XII), Furthermore, the level IV lymph node was dissected after exposing the venous angle and ligating the lymphatic duct at the intermuscular approach. For identifying the transverse cervical artery and cervical nerves, we returned to level V to remove the specimen and complete the lateral neck dissection. Finally, the recurrent laryngeal nerves, parathyroids, and other important structures mentioned previously were taken on completely. Three drainage tubes were placed in the neck. This surgery left minimal scars on the neck, and the cervical sensory nerves were properly preserved.

RESULTS

The patient received treatment after surgery in the hospital for 5 days without postoperative complications. Needle-assisted endoscopic lateral neck dissection through the bilateral areola approach for PTC patients can obtain significant cosmetic results and also minimal invasion for young PTC patients with lateral lymph node metastasis.

CONCLUSION

Needle-assisted endoscopic lateral neck dissection through the bilateral areola approach is considered for N1b papillary thyroid carcinoma without mediastinal metastasis. It is an excellent option for young patients that gives better cosmetic effect and minimal invasion.
Tracheomalacia in a Long-standing Goiter: Myth or Reality?

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INTRODUCTION

Tracheomalacia is reported to occur in 2 to 3% of thyroidectomies for long-standing goiters. We present a case of long-standing toxic goiter, which was measuring 20 × 15 cm and had tracheomalacia found using a novel procedure before extubation and how we managed it.

Three-dimensional Endoscopic Thyroid Surgery using Bilateral Axillary and Breast Approach

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INTRODUCTION

Various approaches of endoscopic thyroidectomy (ET) have evolved in the last decade. Their cosmetic superiority over conventional thyroidectomy is well established. The four-port layout of BABA is essentially a simulation of conventional surgery and offers a familiar operative view. However, conventional two-dimensional laparoscopy has its limitations like lack of depth perception and tactile feedback. Three-dimensional (3D) technique of laparoscopy promises higher magnification and depth perception in order to overcome these restrictions.

MATERIALS AND METHODS

We retrospectively analyzed our prospectively maintained data of patients who underwent ET via BABA using 3D technique from August 2015 to November 2017. Their clinicopathological profile, intraoperative identification of RLN and parathyroids, postoperative complications, and conversion rates were studied.

RESULTS

About 52 patients were identified; 42 women and 10 males. About 54 procedures were performed: 24 total thyroidectomies (TT), 1 TT with central neck dissection (CND), and 1 TT with CND and selective neck dissection (SND) for papillary thyroid cancer (PTC); 2/24 required conversion, 26 hemithyroidectomies (HT), and 2 patients required completion thyroidectomy (CT). Mean tumor size was 5.5 ± 1.4 cm. Mean weight of gland was 35.9 ± 29.9 and 69.5 ± 56.8 gm for HT and TT. In all cases except 1, RLN was identified; 4/54 had temporary vocal cord palsy, 4/26 (15.5%) in TT had symptomatic hypocalcemia. None had permanent RLN palsy or hypocalcemia.

CONCLUSION

The only way to ensure safety and integrity of critical structures is to identify them. The 3D endoscopy facilitates precise dissection by providing, higher magnification, depth perception thus minimizing complications and aiding safer surgery.

Transoral Endoscopic Hemithyroidectomy Vestibular Approach

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INTRODUCTION

In the recent era, where patients insist more on minimally invasive procedures and good cosmetic outcomes, conventional thyroidectomies are being challenged by minimally invasive procedures. Among various minimally invasive techniques for thyroid surgeries that have been developed over time, one such recent technique is Transoral Endoscopic Thyroidectomy using Vestibular Approach (TOETVA). It is truly a scarless technique with minimal complications and good cosmetic outcome. We performed right hemithyroidectomy using this novel approach. The procedure was carried out using three-port technique through oral vestibule, with one 10 mm central camera port and two 5 mm lateral working ports. Cosmetic results were good. We think TOETVA is a promising minimal invasive technique that is safe, feasible and scarless but with a learning curve and will gain wide acceptability in coming years. Here we are discussing about the case we did at our institute using the above-mentioned technique.