
W. Greer Albergotti MD1, J. Kenneth Byrd MD1, John R. De Almeida MS, MD2, Seungwon W. Kim MD1, Umamaheswar Duvvuri MD, PhD2, 1

1Department of Otolaryngology, University of Pittsburgh Medical Center, Pittsburgh, PA
2 Veterans Affairs Pittsburgh Health System, Pittsburgh PA
3Department of Otolaryngology-Head and Neck Surgery, University of Toronto, Toronto ON

ABSTRACT

Background: Minimally-invasive surgery is of increasing importance to the Otolaryngology patient population. This is the first reporting of clinical outcomes of robot-assisted neck dissection through a modified facelift incision by North American groups.

METHODS AND MATERIALS

A retrospective chart review was undertaken to identify as cases patients who had previously undergone robot-assisted neck dissection (RAND). The control group was chosen as a consecutive series of patients who previously underwent open selective neck dissection at our institution, with two controls identified for each case.

METHODS AND MATERIALS

A retrospective chart review was undertaken to identify as cases patients who had previously undergone robot-assisted neck dissection (RAND). The control group was chosen as a consecutive series of patients who previously underwent open selective neck dissection at our institution, with two controls identified for each case.

METHODS AND MATERIALS

A retrospective chart review was undertaken to identify as cases patients who had previously undergone robot-assisted neck dissection (RAND). The control group was chosen as a consecutive series of patients who previously underwent open selective neck dissection at our institution, with two controls identified for each case.

RESULTS

A total of six robotic neck dissections were performed on five patients. Three cases were excluded; one who underwent a level I-III neck dissection and simultaneous partial glossectomy, a simultaneous TORS with RAND, and a contralateral level II-III neck dissection. Three patients underwent level II-IV RAND and were included. Six consecutive open level II-IV neck dissections were identified as a comparison group. All patients were treated in 2012-2013.

CONCLUSIONS

In a small preliminary series, robot-assisted selective neck dissection of levels II-IV through a modified facelift incision is technically feasible and well-tolerated in North American patients. The number of nodes retrieved is comparable to conventional, open neck dissection and hospital stay, JP drainage, and immediate post-operative complications are similar in this small series. Operative time for RAND is significantly longer than traditional open neck dissections. Further work is required to determine whether similar oncologic results can be obtained with this technique.

ACKNOWLEDGMENT

This work was supported in part by funds from the Department of Veterans Affairs, the PNC Foundation, and a research grant from Intuitive Surgical Inc.

We acknowledge useful discussions and support from Dr. Woon Yoo Koh, Yonsei University, Seoul.