Excision of a recurrent oropharyngeal malignant lesion utilizing a minimally invasive transoral robotic surgical (TORS) technique.

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ABSTRACT

A comparison of open surgical techniques with minimally invasive techniques for the management of recurrent oropharyngeal lesions.

OBJECTIVES

The morbidity associated with open surgical approaches for the management of oropharyngeal lesions has led to minimally invasive techniques such as the transoral retroduction surgery (TORS) in lieu of a mandibulotomy approach. There is a paucity of literature outlining its use for recurrent lesions.

STUDY DESIGN

Case report and literature review.

METHODS

A 78 year old male with multiple medical problems presented with a third recurrence of an oropharyngeal malignancy. The primary oropharyngeal malignancy was treated with radiation therapy. He subsequently underwent a partial glossectomy and pharyngectomy with free flap reconstruction for multiple recurrences. Finally, a TORS was performed for excision of a third recurrence. The operative course, length of hospital stay and postoperative follow-up was recorded.

RESULTS

The patient underwent a TORS excision of an oropharyngeal recurrence without complications. Frozen section histology demonstrated negative margins intraoperatively. An oral diet was commenced on hospital day 1 and he was discharged on hospital day 3.

CONCLUSIONS

The TORS technique has proven to be a minimally invasive surgical option for tumors of the oropharyngeal region. We present its use for the treatment of recurrent lesions with encouraging results.

EDUCATIONAL OBJECTIVE

For over 20 years, adequately accessing the posterior oral cavity while preserving nearby structures has been achieved by splitting the mandible, better known as mandibulotomy. Various incisional techniques have been described for mandibulotomy including a lateral, midline, paramedian, premental, and suprathyroid incision. Each approach to mandibulotomy comes with an inherent risk.

The da Vinci system has been shown to reduce trauma during surgery, reduce blood loss, result in shorter hospital stay with a faster recovery and return to normal daily activities. The robot allows for seven degrees of freedom plus three-dimensional viewing with good depth perception because of the coaxial alignment of the eyes, hands, and tool-tip image. The use of the flexible carbon dioxide laser in addition to tremor filtering, enhances surgical dexterity and precision of resections, increasing the ease of surgery and decreasing surgical time.

DISCUSSION

CONCLUSIONS

TORS, as shown in this case report, offers a minimally invasive approach for resecting recurrent tumors in the posterior aspect of the oral cavity, sparing the need for mandibulotomy.

REFERENCES