Correspondence

Fibreoptic laryngoscopy after thyroid surgery

To the Editor:

We would like to report the use of fibreoptic endoscopy as a method for evaluating vocal cord function following surgical procedures that could injure their innervation.

A 45-yr-old woman underwent resection of the thyroid isthmus and right thyroid lobectomy. Anaesthesia and surgery were uneventful but the surgeon requested that vocal cord function be evaluated laryngoscopically during extubation. Towards the end of surgery the patient was allowed to breathe spontaneously, and the anaesthesia was supplemented with 6 mg of morphine. An Olympus LF1 endoscope (Olympus Medical Products, 8370 Dow Cr. Strongsville, OH 44136) was introduced nasally and directed toward the posterior fornix of the vocal cords. The vocal cords were examined with the endotracheal (ET) tube in place and bilateral movement was noted. Then, the cuff of the ET tube was deflated, and the tube was withdrawn past the cords. The area was inspected via the endoscope, and the vocal cords were seen to be in the normal position and moved with respiration. We then elected to remove the ET tube and finished the anaesthesia with mask ventilation. However, the ET could have been advanced into position after the examination. Postoperatively, there were no complications.

We feel that fibreoptic endoscopy is a simple, quick way to evaluate the vocal cords without subjecting the patient to an additional laryngoscopy with its potential risks and discomfort.

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Bullard laryngoscopy for tracheal intubation of patients with cervical spine pathology

To the Editor:

Direct laryngoscopy is the fastest and surest method of tracheal intubation. However, it necessitates anterior

flexion of the lower cervical spine and atlanto-occipital extension in order to achieve axial alignment of mouth, pharynx and larynx, and bring the larynx within line-of-sight of the mouth and expose the vocal cords. Manipulations of the head and neck may not be permitted by a fixed cervical spine, and can be hazardous in patients with unstable cervical spine injury.^{1,2} Also, in-line axial traction or any other manoeuvre for head and neck stabilization may prevent complete alignment of the mouth and glottis.

Awake tracheal intubation has been suggested as an alternative technique for securing the airway in patients with cervical spine pathology. In the awake patient, blind nasotracheal intubation, visual fibreoptic laryngoscopy, as well as retrograde tracheal intubation may be attempted.^{1,2} However, these techniques have their difficulties if not practised frequently.

The Bullard laryngoscope (American ACMI, Stamford, Conn) has been designed as a combination of anatomically shaped rigid blade, with fibreoptic light source to aid direct visualization of the larynx.³⁻⁶ Anatomically, the blade is designed to match the anatomical airway rather than to align the airway to match the blade. These features facilitate visualization of the larynx in patients with cervical spine pathology, while maintaining the head and neck in the neutral position. Although visualization of the larynx is facilitated by Bullard laryngoscopy, passage of the tracheal tube along the side of the laryngoscope may be difficult whether it is achieved by the intubating forceps,³ or by a stylet formed to mimic the shape of the blade.⁵

The present report utilizes the "rail-roading" technique (i.e., introducing the tube over a bougie introducer) for facilitation of tracheal intubation by the Bullard laryngoscope.⁶ At first, a number 7FG ureteric catheter 70 cm long is used as an introducer. The pliable and atraumatic catheter is threaded into the passage of the intubating forceps prior to laryngoscopy. In order to use a larger bougie for facilitation of "rail-roading," a metal tube, 5 mm internal diameter and 14 cm long, was curved to conform to the curvature of the blade and was welded to its right side (Figure). Following visualization of the larynx, the bougie is threaded under vision into the trachea. The laryngoscope is then removed, leaving the bougie *in situ*. The tracheal tube is then threaded into the trachea over the bougie and the bougie removed.

The technique has been used successfully for orotracheal intubation in seven patients with cervical spine