Sir,

Unsuspected difficulty in tracheal intubation is often considered as a dangerous problem for anesthesiologists. We report an unexpected difficult intubation case of a 29-year-old female (height 163 cm, weight 55 kg) who had undergone total thyroidectomy with bilateral radical neck dissection. She was diagnosed with thyroid cancer with metastatic lymph nodes about 46 months ago and received a surgery. However, recently, she was diagnosed with recurrent lymph node metastasis and was scheduled for central neck dissection under general anesthesia. On physical examination, we identified a wide skin incision scar measuring 19 cm on the anterior neck. The airway was Mallampati II and her neck extension was within the normal limits. The patient was never informed about any airway problem. We could confirm Cormack-Lehan II based on previous anesthetic record. She was positioned in the sniffing position with the neck flexed and the head extended with a pillow under the head for induction. General anesthesia was induced with remifentanil, propofol, and rocuronium. She was easily ventilated with mask and bag. The tip of a curved blade using a laryngoscope was inserted into the vallecula. The handle was raised up and away from the patient with additional lifting force to expose the vocal cords. However, it was difficult to visualize her vocal cords and the Cormack-Lehan grade was identified as of III. Despite the additional application of external laryngeal pressure, no change in the laryngeal view was noted. So we tried to intubate using GlideScope. Although the image provided by the GlideScope showed a good visualization of the patient’s glottis, a slight elevation in the larynx was noted. It was difficult in advancing the endotracheal tube into the glottis as the tube advanced posteriorly into the arytenoids repeatedly. Finally, we were able to intubate the patient’s trachea using GlideScope-assisted fiberoptic bronchoscope. In our case, we think that the adhesion or fibrosis of soft tissue around the airway after wide neck surgery might have been the possible cause of difficult intubation. Previously, it has been reported that fibrosis of soft tissue induced by radiotherapy related to neck malignancy can cause difficulty in intubation.[1,2] In some cases, traction forces caused by scar contracture may also pull laryngeal structure anteriorly.[3] Surgical trauma can also lead to scarring of soft tissue around the airway thus making them stick with each other. The abnormal adherence to surrounding airway can restrict the normal mobility and cause fixation of the larynx. Also, we could find adhesive tissues during the surgical dissection. On pre-anesthetic evaluation, we could not predict the difficulty with intubation based on the history of wide neck surgery. The only way to diagnose adhesion is by direct visualization during surgery. It is not easy to predict the soft tissue adhesion if the external scar contracture, such as a burn, does not exist. Consequently, we propose that the history of wide neck surgery can be a risk factor for difficult intubation although previously, there have been no reports on the issue of difficulties in intubation.

Declaration of patient consent
The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

Conflicts of interest
There are no conflicts of interest.
Ultrasound for predicting the suitable nostril for nasotracheal intubation: Look before you leap!

Sir,

Complications of nasotracheal intubation range from trauma to patient by endotracheal tube (ETT) (epistaxis, avulsion of nasal turbinates) to trauma to ETT by the patient (distorted anatomy, nose pins causing cuff rupture). Ruptured cuff may cause aspiration, anaesthetic gas leak along peritubal space and ineffective ventilation leading to hypoxia. Forewarned is forearmed. We describe a clinically viable, non-invasive, radiation free and point of care (POC) sonographic technique which can predict and prevent these complications.

A 35-year-old, 60 kg male, carcinoma right buccal mucosa patient, was planned for the Commando surgery. An awake fibreoptic bronchoscopic (FOB) tracheal intubation under nerve blocks was planned through the more roomy appearing left nostril. A well lubricated, 7 mm ID flexometallic cuffed endotracheal tube (FMCETT) pre-loaded over an FOB (4.2 mm diameter) was smoothly railroaded into trachea. On attempting cuff inflation, cuff was found to be ruptured. On replacement with another FMCETT over a tube exchanger, same problem recurred. Concurrent analysis of the magnetic resonance imaging (MRI) image revealed a sharp spur in left nasal cavity prompting us to attempt nasal intubation via the right nostril. Cuff of the third FMCETT, was found to be intact. This was confirmed by absence of peritubal leak over larynx on palpation and auscultation, sonographically (sustained tracheal dilatation in the suprasternal region) and with aneroid manometer. Auscultatory and capnographic confirmation of FMCETT placement was done. A retrospective ultrasound of the nasal cavity verified the presence of deviated nasal septum (DNS) and nasal spur.

Assessing nasal patency by inserting clinician’s lubricated, gloved, little finger into the patient’s nostril, is crude. Anteriorrhinoscopy does not reveal posterior nasal abnormality. Flexible endoscope/FOB provides detailed examination of the entire nasal cavity for nostril selection. Rhinomanometry, acousticrhinometry and nasal peak flow provide little clinical value in nostril selection. Imaging techniques mention techniques involving radiation (X-ray paranasal sinus occipitomental view, panoramic or posteroanterior skull radiography and computed tomography) without providing working anatomical knowledge for clinical interpretation. Head and neck oncosurgical patients have MRI/computed tomography (CT) scan image displayed in OT [mandated by the World Health Organization (WHO) safety checklist].