



Fig. 2. Before and after exercises using the plastic clothes peg.

is prevalent in the lower socioeconomic strata where active jaw exercises are not often complied with, we recommend this alternative, cost-effective method.

#### Conflict of interest

We have no conflicts of interest.

#### Ethics statement/confirmation of patient's permission

Ethics approval was given. Informed consent has been obtained from the patient.

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#### Inadvertent entrapment of nasotracheal tube with a screw during bimaxillary osteotomy

Sir,

Damage to the endotracheal tube in orthognathic surgery is not uncommon. Inadvertent tearing of the tube by a reciprocating saw has been experienced in many centres.<sup>1–3</sup> This kind of damage is usually immediately obvious, as bubbling and problems with ventilation mean that the tube must be replaced.<sup>3</sup> Some of these cases may also present with difficulties in extubation.<sup>4,5</sup> Here we present a patient who had a double-jaw operation in which the nasotracheal tube was found to be stuck during awakening in the recovery room, and which was managed by an immediate return to theatre.

A 30-year-old man, who was having maxillary advancement and mandibular setback, was intubated through the left nostril with a 7F, cuffed, spiral-embedded endotracheal tube. Mini-plates were being fixed to the maxilla, with the screw holes drilled bicortically at the bilateral maxillary buttresses and pyriform aperture. There were no bubbles or other visible signs of air leakage, and no abnormalities were noted on oxygen monitoring at any time during the operation.

The nasotracheal tube was aspirated at the end of the operation with a nasogastric cannula, which glided effortlessly and brought out clear secretions only. The patient was brought to the recovery room, breathing spontaneously. Soon, the surgical team was informed that the tube was entrapped and he was taken back to theatre. As he was still breathing spontaneously, a flexible endoscope was introduced into the nasotracheal tube, and showed that the tip of a screw had punctured it (Supplemental Figure 1), and a free-floating spi-

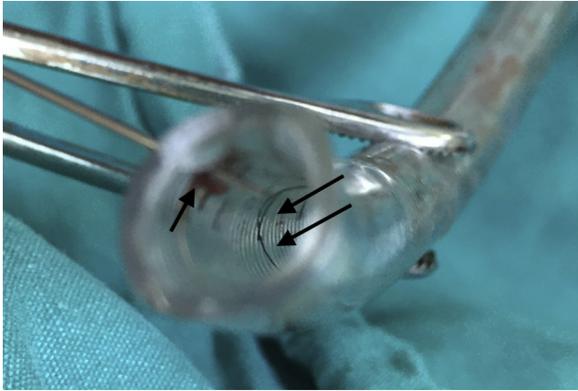


Fig. 1. Postoperative evaluation of the nasotracheal tube. Single arrow shows the penetrating point of the 9 mm mini-screw (cannulated). The double arrow shows the free-floating spiral wire of the tube.

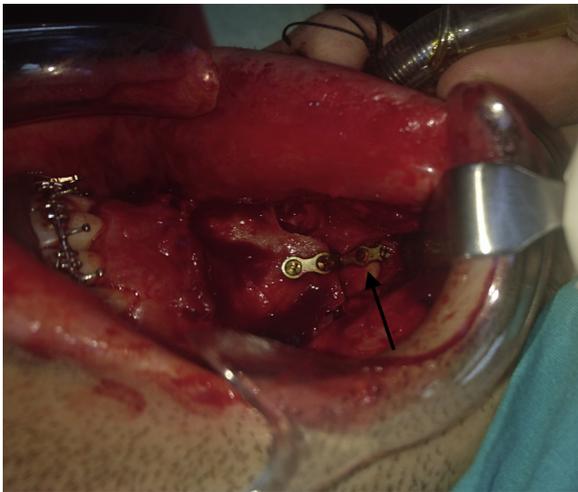


Fig. 2. Left pyriform aperture fixation plate after removal of the 9 mm mini-screw (arrow).

ral wire (Fig. 1) had been released into the lumen at the level of the left pyriform aperture. After removing the left upper vestibular sutures, we removed a 9 mm screw (Fig. 2).

Inability to extubate after an apparently uneventful orthognathic operation necessitates an immediate return to theatre. Simply checking by hand if the tube is movable after plating the pyriform aperture may be useful to prevent facing this eventuality. Flexible endoscopy through the endotracheal tube is a practical way to display and locate any such puncture. Lastly, we should be cautious about the length of the screws we use around the pyriform aperture, as they can be critical to the safety of the nasotracheal tube.

#### Conflict of interest

We have no conflicts of interest.

#### Ethics statement/confirmation of patient's permission

No ethics approval was needed for this report. The patient provided written informed consent.

#### Financial disclosures

None.

#### Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:<https://doi.org/10.1016/j.bjoms.2019.08.016>.

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#### Regional migratory osteoporosis in oral and maxillofacial surgeons

Sir;

Regional migratory osteoporosis is an uncommon disease that is characterised by an idiopathic migrating arthralgia of the weight-bearing joints of the lower limbs, and is associated with severe focal oedema of the bone marrow.<sup>1</sup>

To the best of our knowledge, only one study to date has analysed the professions of patients with this disease,<sup>2</sup> and