

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.

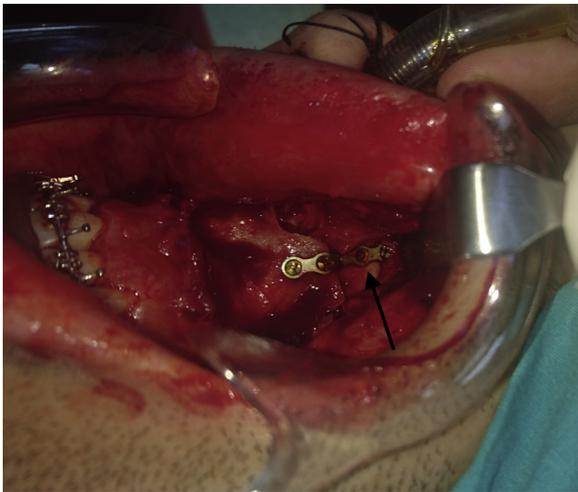


Fig. 2. Left pyriform aperture fixation plate after removal of the 9 mm mini-screw (arrow).

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.¹

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



Fig. 1. Coronal T2-weighted fat-saturated magnetic resonance image of the left knee. There is diffuse, increased signal intensity of the lateral femoral condyle compatible with oedema of the bone marrow (arrow).

it showed a high prevalence of transient osteoporosis among physicians, including oral and maxillofacial surgeons, and dentists. We present a new case of regional migratory osteoporosis in such a physician.

A 58-year-old, white, male, oral and maxillofacial surgeon presented to the rheumatology department complaining that he had had severe pain in his left foot and ankle for the previous 25 days. He denied any antecedent injury, and was a heavy smoker (more than 20 cigarettes/day for more than 20 years).

Further review of his medical history showed one similar episode of pain in his left knee, seven years before, that had resolved spontaneously after two months. Retrospectively, the magnetic resonance images of the knee were consistent with bone marrow oedema syndrome (Fig. 1), but a diagnosis had not been made at the time. Physical examination showed mild swelling and tenderness of the upper area of the left foot. He had an antalgic gait and a pain-induced restricted range of motion in the left ankle and midfoot. There were no signs of synovitis or tendinitis. Magnetic resonance imag-

ing of his left foot showed bony oedema in the tarsal bones (Fig. 2). After four months, all symptoms disappeared completely without any medication, and a diagnosis of regional migratory osteoporosis was made.

In the past 40 years, over 800 cases of transient osteoporosis have been reported, mainly as case reports of a single patient or at most a few at a time. A review of 56 patients who had been evaluated at the Mayo Clinic before 1985,³ and other reviews,⁴ have alluded to certain predisposing factors such as pregnancy, sudden overuse of the lower limbs, a previous episode of transient osteoporosis, metabolic disorders of the bones (hypercalcaemia, hypovitaminosis D, primary hyperparathyroidism) and cigarette smoking.

In a recent retrospective cohort study conducted at the clinic Mayo Clinic (October 31 2001 - November 1 2016) the most common risk factor was found to be low mineral density in the bones. The next most common risk factors were rapid overuse of the limbs and more than one episode of transient osteoporosis was followed by a disorder of the metabolism of bones and minerals.⁵

Only one study that we are aware of related the occurrence of transient osteoporosis with the patients' occupation.² In this study, 11 of the 17 male patients were doctors (particularly in oral and maxillofacial surgery and gastroenterology), and two were commercial pilots. Further research is recommended to answer the question of whether occupation, specifically that of a maxillofacial surgeon or dentist, is a risk factor for developing regional migratory osteoporosis. Oral and intravenous bisphosphonates have been reported to be effective in resolving symptoms in the first month after the onset of symptoms.

Conflict of interest

We have no conflicts of interest.

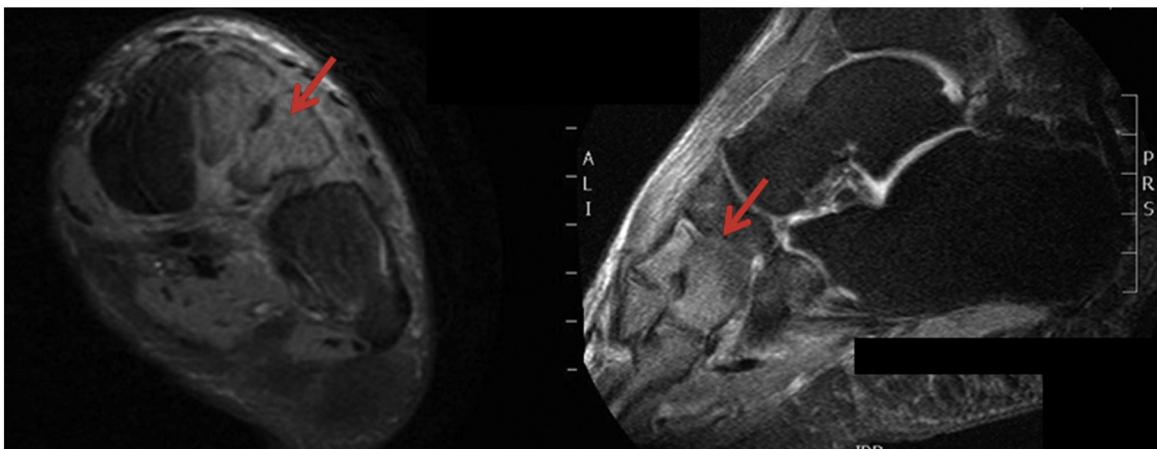


Fig. 2. Coronal T2-weighted fat-saturated magnetic resonance image of the left knee. There is diffuse, increased signal intensity of the lateral femoral condyle compatible with oedema of the bone marrow (arrow).

Ethics statement/confirmation of patient's permission

Ethics approval was not required, and we acquired the patient's permission for publication.

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(M.F. Escobedo)

Why do airline cockpits differ from operating theatres? Re: Lead article: What has an Airbus A380 Captain got to do with OMFS? Lessons from aviation to improve patient safety

Sir,

We read with fascination the parallels drawn between airline pilots and surgeons by Davidson and Brennan.¹ Aircraft pilots once flew “by the seat of their pants” but now follow safety checklists, briefings, and debriefings. Similarly, senior surgeons no longer “cut” arbitrarily; they follow evidence-based guidelines, and participate in audits.

Why is it that a difference exists in hierarchy inside cockpits and operating theatres? There are some noteworthy differences that exist between commercial flying and surgery. Most surgeons learn their skills “on the job” in contrast to airline pilots who for decades have had the benefit of mastering essential skills – with the opportunity to survive mistakes! – on simulators. In contrast, haptic feedback train-

ing is not universally adopted. Instrument-guided landing is the *de facto* standard adopted by modern airports, whereas navigation-guided surgery is still exotic. Even in flying situations where advanced instrument-guided navigation, night vision and terrain-following radar are absent, cockpit systems have for decades provided effective audible warnings in critical situations such as proximity to the ground or when approaching stall speeds.

In contrast, manual vigilance is required on the part of the operating surgeon to avoid cutting a vessel or damaging a nerve. Critical equipment such as the use of nerve stimulators require manual use and interpretation and are not automatic. There is no “autopilot” while operating, irrespective of the surgeon's fatigue. Complications put the onus of legal responsibility on the operating surgeon, not the assistant.

Davidson and Brennan rightfully highlight gaps in communication. Junior trainees do fail to speak out for the reasons they correctly listed. However, unlike in commercial aviation (with Crew Resource Management protocols) verbal reminders and warnings provided by junior trainees can sometimes feel insulting to senior surgeons because of the manner in which they are communicated. If operating consultants are guilty of creating barriers to useful criticism, it could also be, perhaps, that communication in both directions is brusque, or of a manner that could be perceived as disrespectful.

In a recent incident at a Kolkata hospital in India, the media covered an assault on a resident by the irate family members of a patient. Though the manner in which the frustration manifested was unfortunate, I have personally witnessed the curt and unhelpful behavior of a resident on duty (while facilitating an admission to accident and emergency) with little humane empathy evident in dealing with a visibly unwell patient who was accompanied by a worried relative.

While in complete agreement with Davidson and Brennan on the need for better team-working skills, checklists, briefings and debriefings, we need to remember not just to talk, but to re-examine *how* we speak to each other in outpatient departments, operating rooms, and wards. Tomorrow's surgeons will be able to create an open and non-threatening atmosphere in their theatres and wards if, in their formative residency years, they are able to cultivate the art of soft skills and excellent communication. Formal training in good verbal and non-verbal communication skills and etiquettes is possibly the missing human factor that is required to improve operative safety for our patients.

Conflict of interest

We have no conflicts of interest.

Ethics statement/confirmation of patients' permission

Not required.