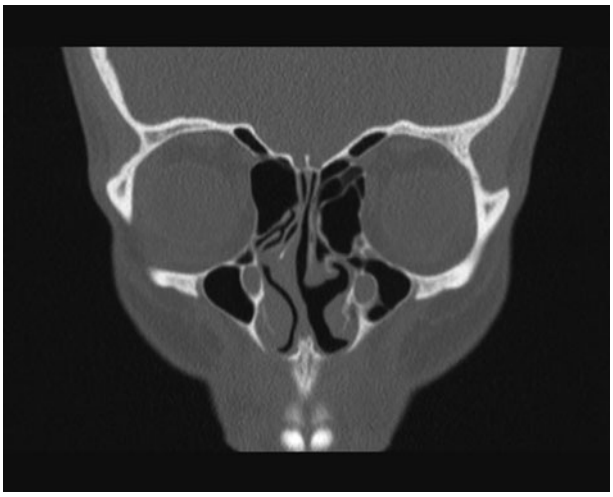


FIG. 4

The risk of injury to the anterior ethmoidal artery is increased when it emerges from the orbit (creating an indentation often referred to as Kennedy's nipple) and runs in a mesentery free of the skull base, before entering the intracranial cavity, present bilaterally in this patient.

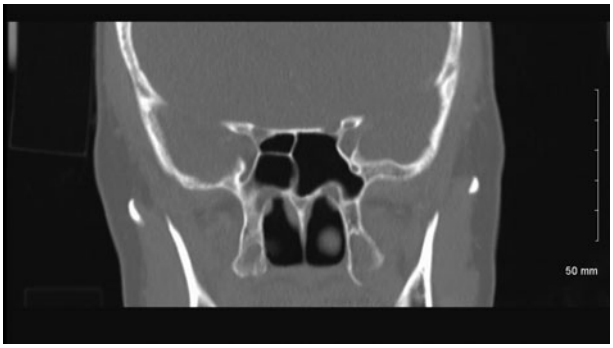


FIG. 5

A sphenoethmoidal (Onodi) cell develops laterally and/or superiorly to the sphenoid (shown here lying superiorly to the right sphenoid sinus) and may contain the optic nerve. The presence of a horizontal septation on coronal view will usually alert the surgeon to its presence.

injury, and, again, should be recognised by the surgeon (Figure 3), particularly in the setting of extensive disease. This often also indicates a need for complementary magnetic resonance imaging to better define the extent of disease.

Anterior ethmoid artery injury may cause significant intra-operative haemorrhage, but, more significantly, may result in intra-orbital haematoma and blindness. The risk of injury is increased when the vessel emerges from the orbit in its own mesentery, free of the skull base (Figure 4) or when dehiscent. Nearly half of patients may demonstrate asymmetry in the anterior ethmoid position.[9]

A sphenoethmoidal (Onodi) cell has been defined as 'a posterior ethmoidal cell which develops laterally and/or superiorly to the sphenoid sinus. The optic nerve may lie within this sphenoethmoidal cell rather than in the lateral wall of the sphenoid sinus' (Figure 5).[10] The surgeon may therefore come across the optic nerve unexpectedly in the posterior ethmoid; in particular, one should exercise caution if choosing to enter the sphenoid sinus through the posterior ethmoids instead of through its natural ostium.

In summary, we commend the call to improve the quality of CT scan interpretation, although our interpretation of 'critical areas' for interpretation would be wider ranging than those identified by the panel. In addition, it is our opinion that we as surgeons should shoulder this responsibility for scan interpretation first and foremost as part of our duty of care to patients undergoing FESS.

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Authors' reply

Dear Editors,

We would generally agree with comments made by Walker *et al*., which, firstly, relate to placing the onus upon the operating surgeon, and, secondly, consider an alternative conclusion that may be derived from the ENT-UK panel study that suggested improvement in peri-operative safety would be achieved in part by enhancing the otolaryngologist's ability to evaluate and interpret paranasal sinus computed tomography imaging.[1] When compared to the radiologist, one specific area where the surgeon will gain advantage pertains to the feedback gained from the intra-operative findings, thus enabling them to correlate clinical and radiological features in an interchangeable manner.

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As alluded to in the main article, there are several reasons why this topic remains controversial.[1] In the UK, functional endoscopic sinus surgery (FESS) is commonly performed by the non-rhinologist. Analysis of individual responses to the panel survey highlighted the variation in expertise for performing FESS, which correlated to an apparent lack of confidence in the dissection of certain anatomical sites. The relationship between this expertise and reliance upon 'formal' radiological reporting was present during subgroup analysis.

Our study aimed not to contest the importance of these areas per se, but, more specifically, to gain an opinion from the UK otolaryngologist who practises FESS as to which structures would be relevant to them when included in a formal radiological report, which in turn can help radiologists compile surgically relevant reports for those who use them routinely. We have postulated within our discussion why several 'key' areas did not attain 'vital importance' status, which may in part be related to the level of expertise in performing FESS. Anatomical studies and checklists of important areas relating to FESS have been previously described in the literature.[2–4] These have all identified the key or 'vital' sites that pose the greatest risk of morbidity and mortality (e.g. lamina papyracea, skull base, dehiscence of carotid). There is no doubt that these well-described areas, which have been re-iterated by Walker *et al*. in their letter, must be thoroughly assessed prior to any sinus dissection in their proximity.

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