

Letter to the Editor

Transmigrated mandibular canines causing direct conflict with the WHO Surgical Safety Checklist

Sir,

Dental transmigration is when an unerupted tooth crosses the midline, and occurs almost exclusively in mandibular canines with a reported incidence of 0.1%–0.31%.¹ To date, we have encountered eight cases of transmigrating mandibular canines that have crossed the symphyseal suture by more than half its length (Fig. 1). They all required removal for



Fig. 1. Panoramic radiograph showing the transmigration of a permanent lower left canine across the midline by more than half its length.

orthodontic purposes or as a result of associated cystic pathology.

The Surgical Safety Checklist (SSC) was developed by the World Health Organization (WHO) to improve communication, and reduce errors and adverse events.² In 2009, the National Health Service (NHS) mandated the use of an adapted version of the SSC in its hospitals in England and Wales (Fig. 2).³ Items in the checklist may conflict with the removal of these teeth, which are no longer in their original positions. Based on our experience, we propose some additional steps to eliminate confusion and improve communication under these circumstances (Table 1).

Table 1

Additional steps to eliminate confusion and improve communication.

Before induction – surgical sign-in:

Contemporaneous records of the planned procedure that have been ratified by the surgeon and orthodontist should be maintained.

Proposed surgical intervention and the site-specific risks (numbness to the chin, weakness of the chin muscle, damage to the adjacent teeth, and fracture of the mandible) must be explained to the patient and person with parental responsibility to encourage active participation through a two-stage process of consent.⁴

The consent should clearly state without any ambiguity – for example, “Surgical removal of left lower canine from right chin/mandible” or vice versa.

The correct surgical site should be marked before the procedure.

Before skin incision – surgical time-out:

All the team members should be informed of the planned operation and the confusion/discrepancy created as a result of the transmigration of the tooth.

Use of the consent form, marking of the surgical site, relevant imaging on display, and details written on the board, all aid those present to understand the procedure.⁵

Encourage team members to raise any issues of confusion or concern before proceeding in case further time, patience, and clarity of explanation may be required.

Before the patient leaves the theatre – surgical sign-out:

Confirm the planned procedure.

Enumerate any issues or complications during operation.

Relay specific procedure information to the recovery team to ensure complete awareness by all teams involved.

The transmigrated tooth is the only phenomenon in surgery where the entity to be removed is notated differently from the site of removal. Disagreement with the checklist can be avoided by ensuring good communication throughout, and by actively encouraging the patient’s participation and that of all those involved in their care in discussions around the treatment to ensure that complete understanding is achieved.

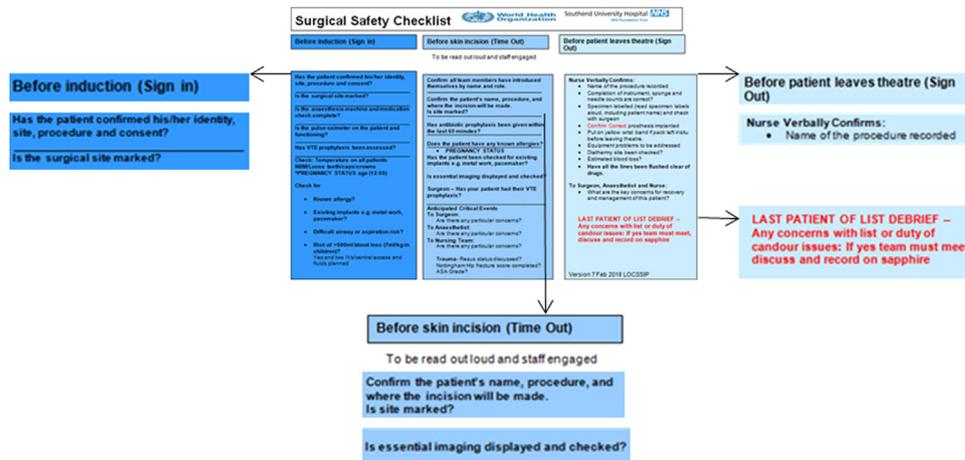


Fig. 2. Modified WHO Surgical Safety Checklist, as used in Southend University Hospital.

Conflict of interest

We have no conflicts of interest.

Ethics statement/confirmation of patients' permission

Ethics approval not required. The patients' permission was obtained.

References

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B.K. Dev*
K. Ganesan
L. Fountain

Southend University Hospital

*Corresponding author at: Southend University Hospital, Oral and Maxillofacial Department, Prittlewell Chase, Westcliff-on-Sea, Essex, SS0 0RY.

E-mail addresses: Bipandee.Dev@southend.nhs.uk (B.K. Dev), Kandasamy.Ganesan@southend.nhs.uk (K. Ganesan), Louisa.Fountain@southend.nhs.uk (L. Fountain)

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