

were two crowns and four roots which we diagnosed as fusion of a supernumerary tooth to the left mandibular third molar. The tooth was fused at the dentine and the pulp chambers were connected, suggesting that fusion occurred early in development.

A rare fusion variant of this kind is of interest to a general dentist because of its clinical implications. Although a majority of fused teeth are asymptomatic and require no treatment, some may cause issues such as crowding, impaction, and periodontal conditions. Accurate diagnosis and careful radiographic evaluation are important to achieve a successful clinical outcome.

*K. Kirkham-Ali, J. Sher, A. Sholapurkar, Cairns, Australia*

DOI: 10.1038/s41415-019-0625-8

## Dental trauma

### Nail gun injury

Sir, a 30-year-old carpenter attended the A&E department complaining of a laceration to his cheek and an altered bite following a nail gun misfiring at work. On clinical examination, he had a 1 cm linear laceration to his right cheek and was unable to occlude his teeth. Radiographs (Fig. 1) revealed an 8 cm nail traversing the maxilla.

It is estimated that nail gun injuries are responsible for 37,000 A&E attendances each year and reports state that the number of injuries are increasing.<sup>1</sup> A number of these cases resulted in significant morbidities and could have been prevented by improved personal protective equipment. Current guidelines recommend wearing hard hats and eye protection only, when operating a nail gun.<sup>2</sup> We would suggest that these guidelines could be revised to include full-face protection due to the severity of related injuries.

The nail was removed under general anaesthetic via a second incision in the right cheek. The patient was reviewed two weeks post operatively and had no long term complications from his injury.

*D. Brown, B. Collard, A. McLennan, Exeter, UK*

### References

1. Lipscomb H, Jackson L. Nail-gun injuries treated in emergency departments – United States, 2001-2005. *MMWR Morb Mortal Wkly Rep* 2007; **56**: 329-332.
2. Department of Health and Human Services; Centers for Disease Control and Prevention; National Institute for Occupational Safety and Health; Department of Labor; Occupational Safety and Health Administration. Nail gun safety: a guide for construction contractors. 2011. Available at: [https://www.osha.gov/Publications/NailgunFinal\\_508\\_02\\_optimized.pdf](https://www.osha.gov/Publications/NailgunFinal_508_02_optimized.pdf) (accessed July 2019).

DOI: 10.1038/s41415-019-0626-7

## OMFS

### Accidental bite injury

Sir, we wish to report an unusual accidental bite injury of the lower lip following administration of local anaesthetic. A 21-year-old gentleman presented to the Accident and Emergency department having bitten the left lower lip. This occurred shortly after leaving his dental practice where he had several dental restorations completed in the lower left quadrant under local anaesthesia. Difficulties achieving oral competency were reported. Medically the patient was managing Type 1 Diabetes.

On examination there was an approximately 2 cm defect extending to the left commissure, affecting the vermilion of the lip, the labial mucosa but not the vermilion border (Fig. 1). It was not possible to close the defect primarily and so the patient was subsequently admitted by Oral and Maxillofacial Surgery for repair with advancement of a musculo-vermillion flap. The patient was regularly reviewed within the department and was still concerned with the residual swelling in this area at the three-year review. Further debulking of this area was subsequently completed in theatre.

This case highlights the potentially serious consequences of self-inflicted trauma following local anaesthetic administration. While the vast majority of patients do not sustain this severity of injury we, as dental practitioners, should be routinely giving post-operative instructions to all patients following administration of local anaesthetic.

*L. Mackie, S. Laverick, Dundee, UK*

DOI: 10.1038/s41415-019-0624-9

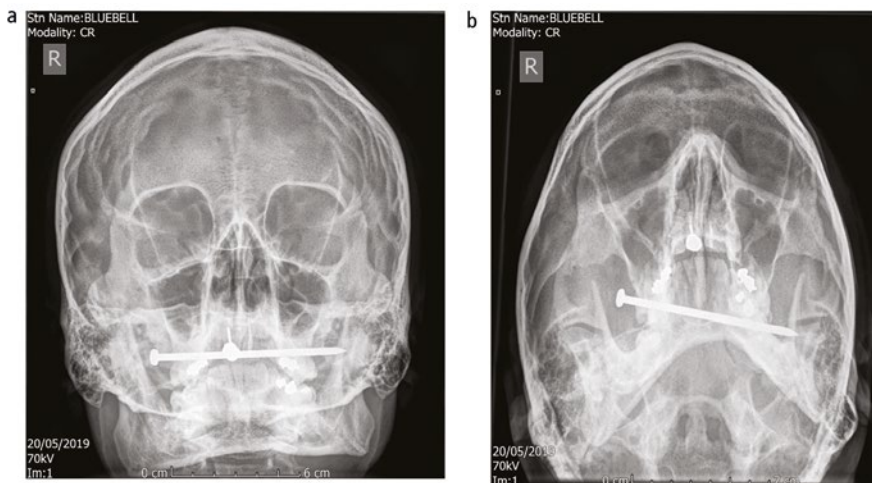


Fig. 1 Occipitontental 0 and 30 degree radiographs showing 8 cm nail across maxilla



Fig. 1 The patient with an accidental bite injury