

Management of lip paraesthesia post root canal treatment via unilateral sagittal split osteotomy: case report

Précis: Surgical exploration via sagittal osteotomy effectively resolved an inferior alveolar nerve injury caused by overfilled root canals, leading to significant symptom improvement.

Abstract

This case report discusses a rare and severe complication arising from endodontic treatment, specifically overfilling and extrusion of root canal sealer into the mandibular canal, leading to injury of the inferior alveolar nerve (IAN).

A 42-year-old female presented with severe pain and complete paraesthesia in the lower lip and chin area ten days after endodontic treatment. Radiographic examinations revealed left overfilled root canals extending approximately 5cm along the mandibular canal.

A unilateral sagittal split osteotomy was performed using piezosurgery to protect the nerve. Meticulous dissection was performed to release it from the canal. Notably, rigid paste debris was observed in proximity to and within the nerve canal. The nerve exhibited signs of swelling and was enveloped by granulation tissue. A thorough cleaning procedure ensued, followed by the repositioning of the two mandibular cortices, securing them in place with AO 5mm diameter bicortical screws. Orthodontic brackets were used to stabilise the occlusion for six weeks. Two weeks after the surgery, the patient reported that the pain had significantly improved, with only a tingling sensation remaining. The feeling of pressure was completely relieved. At one-year follow-up, the sensation was partially restored and no pain was reported. This case underscores the potential for serious complications arising from endodontic treatments and highlights the efficacy of surgical exploration, particularly through sagittal osteotomy, in addressing nerve injuries caused by overfilled root canals.

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Learning style preferences of undergraduate dental students in Northern Ireland

Précis: This paper's findings suggest that learning style preferences do not appear to explain the existing gender differences in academic attainment of dental undergraduate students.

Abstract

Understanding how students approach learning is of interest in health professional education, although there is limited evidence that identifying learning styles improves educational outcomes.

This study investigated learning style preferences of clinical dental students at Queen's University Belfast, using the VARK questionnaire, and explored whether preferences were associated with gender or academic achievement. Of 86 respondents (72% response rate), 69% preferred multimodal learning styles, with quad-modal (all four VARK modes) being the most common at 41%. Multimodal refers to a preference for more than one learning style. No relationship was found between learning style, gender, or academic distinction. Notably, a higher proportion of females achieved distinctions, a finding warranting further exploration.

These results suggest that while multimodal learning is common, learning style preferences do not explain gender differences in academic performance. Given the lack of evidence for the efficacy of adapting teaching to learning styles, caution is warranted in using this information to inform curriculum design.

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