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Spontaneous Eruption of Impacted Teeth While Awaiting Surgical Intervention

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Abstract: Background: Impacted and ectopic teeth present in 1-2% of orthodontic patients and often require joint surgical and orthodontic management. The authors present two patients undergoing orthodontic treatment, where the impacted teeth, in a hopeless position, spontaneously erupted during the period of cessation of general anaesthetic lists during the COVID-19 pandemic. Patient information: A healthy 11-year-old boy was referred to the Department of Oral and Maxillofacial Surgery for the management of a mesioangular impacted LR7. The patient was seen by the joint oral surgery/orthodontic team, who planned for the removal of the LR7 under general anaesthetic. A healthy 13-year-old boy was referred to the same Department and team for surgical extraction of unerupted and buccally impacted UL3 and UR3 under general anaesthetic. Management and outcome: The majority of elective dental-alveolar work ceased as a result of the global pandemic. On resumption of activity, the first patient was reviewed in July 2021. The LR7 had spontaneously erupted in a favourable position, and following MDT review, a decision was made to forgo any further surgical intervention. The second patient was reviewed in July 2021. The UL3 had clinically erupted, and there was radiographic evidence of favourable movement of UR3. Due to the nature of the patient's malocclusion, the decision was made to proceed with the extractions as previously planned. Key Learning Points: Severely impacted teeth do have a prospect of spontaneous eruption or alignment without clinical intervention, and current literature states the initial location, axial inclination, degree of root formation, and relation of the impacted tooth to adjacent teeth roots may influence spontaneous eruption. There is potential to introduce a period of observation to account for this possibility in the developing dentition, with the aim of reducing the unnecessary need for surgical intervention. This could help prevent episodes of general anaesthetic and allocate theatre space more appropriately.

Keywords: spontaneous eruption, impaction, observation, hopeless position, surgical, orthodontic, change in treatment plan

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