

IMPLANT ASSOCIATED FRACTURED TEETH

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This study is aimed to report a possible effect of the presence of dental implants on the development of crown or root fractures in adjacent natural teeth. A series of 26 cases of teeth diagnosed with crown or root fractures after the placement of dental implants in the adjacent area is described and analyzed. In addition, a systematic review was undertaken to identify additional studies that assessed this potential complication. The case series revealed that all crown fractured teeth were non-endodontically treated teeth (n=18), and all root fractured teeth were endodontically treated teeth (n=8). The time from implant loading to the diagnosis of a fracture in an adjacent tooth was longer than one year in 78% of cases. Most fractures occurred in female patients, over 50 years of age. Most of the patients received two or more implants. Nine (50%) of the teeth with crown fracture were molars, seven (39%) were mandibular premolars, and two (11%) were incisor teeth. Most teeth with root fracture were premolar or mandibular molar teeth - 6 (75%). All teeth with root fractures had been restored with a post and crown, and the quality of the root canal filling was adequate. The systematic review revealed that implant-associated fractured teeth has not been reported in the literature yet. This case series, although limited in its extent, is the first clinical report of a possible serious complication of implants, implant-associated fractures in adjacent endodontically and non-endodontically treated natural teeth. The most common patient profile found in this series was a woman over 50 years of age, having a fractured premolar tooth, which was diagnosed more than one year after reconstruction that was based on multiple adjacent implants. Additional clinical studies are required to shed light on this potential serious complication