

Implant survival rate after oral cancer therapy: a review.

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Abstract

The overall impression regarding the success of dental implants (DI) in patients having undergone oral cancer therapy remains unclear. The aim of the present review study was to assess the implant survival rate after oral cancer therapy. Databases were explored from 1986 up to and including September 2010 using the following keywords in various combinations: "cancer", "chemotherapy", "dental implant", "oral", "osseointegration", "radiotherapy", "surgery" and "treatment". The eligibility criteria were: (1) original research articles; (2) clinical studies; (3) reference list of pertinent original and review studies; (4) intervention: patients having undergone radio- and chemotherapy following oral cancer surgery; and (5) articles published only in English. Twenty-one clinical studies were included. Results from 16 studies reported that DI can osseointegrate and remain functionally stable in patients having undergone radiotherapy following oral cancer surgery; whereas three studies showed irradiation to have negative effects on the survival of DI. Two studies reported that DI can osseointegrate and remain functionally stable in patients having undergone chemotherapy. It is concluded that DI can osseointegrate and remain functionally stable in patients having undergone oral cancer treatment.

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