

Table 1. Assessment and treatment of oral foci within or outside the radiation field

From: [Patients with advanced periodontal disease before intensity-modulated radiation therapy are prone to develop bone healing problems: a 2-year prospective follow-up study](#) (Schoorhuis 2018)

Assessed tooth problems	Treatment if cumulative dose > 40 Gy ^a	Treatment if cumulative dose < 40 Gy or outside the radiation portal ^a
Caries profunda	Tooth extraction	Restoration, if necessary combined with endodontic treatment, or tooth extraction
Periapical pathosis (on radiographs) without symptoms and/or additional problems	In teeth <i>without</i> root canal filling: endodontic treatment and/or apexification In teeth <i>with</i> root canal filling: endodontic re-treatment, apexification, or tooth extraction (needed in case of pre-radiotherapy time limitations)	In teeth <i>without</i> root canal filling: endodontic treatment In teeth <i>with</i> root canal filling: endodontic re-treatment, apexification, or tooth extraction Treatment can be postponed until after radiotherapy
Extensive periapical pathosis (on radiographs) combined with periodontal disease, in afunctional teeth or <i>with symptoms</i>	Tooth extraction	In teeth <i>without</i> root canal filling: endodontic treatment combined with initial periodontal treatment In teeth <i>with</i> root canal filling: endodontic re-treatment, apexification, or tooth extraction depending on the prognosis
Avital pulp <i>with symptoms</i> without periapical radiolucency on radiographs	Endodontic treatment or tooth extraction (which might be necessary in case of pre-radiotherapy time limitations)	Endodontic treatment or tooth extraction depending on the prognosis
Avital pulp <i>without symptoms</i> and without periapical radiolucency on radiographs	Endodontic treatment or tooth extraction (needed in case of pre-radiotherapy time limitations)	Endodontic treatment (which can be postponed until after radiotherapy)
Periodontal disease with: Pockets 4–5 mm	Initial periodontal therapy	Initial periodontal therapy
Pockets ≥ 6 mm	Tooth extraction	Initial periodontal therapy
Gingival recessions ≥ 6 mm	Tooth extraction	Only recession requires no treatment

Assessed tooth problems	Treatment if cumulative dose > 40 Gy ^a	Treatment if cumulative dose < 40 Gy or outside the radiation portal ^a
Impacted teeth or roots fully covered by bone without radiographic abnormalities	No treatment If problems are expected in the future: tooth extraction	No treatment
Impacted teeth or roots <i>not fully covered</i> by bone or with radiographic abnormalities (e.g., cysts, apical radiolucency)	Tooth extraction	No treatment or, in case of symptoms, surgical removal Roots with periapical radiolucency might be worth preserving by endodontic treatment and restoration (which can be postponed until after radiotherapy)
Cysts	Surgical removal	Surgical removal
Internal or external root resorption	Tooth extraction	Endodontic treatment or tooth extraction depending on the prognosis