



Retaining versus removing natural teeth



One of the most challenging tasks in establishing a proper treatment plan is to identify key teeth that can be kept and those that

should be removed. There are two major considerations that make such decisions difficult. The first involves the patient's request to retain natural dentition. While a patient's wishes and desires should always play a major role in decision-making, in some situations accommodating such a request will compromise the treatment result.

The second issue that makes decision-making difficult is the condition and location of the natural tooth/teeth under consideration. Although I am a big proponent of implant dentistry, I also think—contrary to common belief—that natural teeth are still worthy of hefty investments to retain them. Root canal treatment, post and core buildup, and a full-coverage restoration are considerable investments, but in many situations they are proven procedures with good long-term prognoses.

Removing a natural tooth becomes a viable option when the remaining dentition no longer provides the proper environment to facilitate an effective and sensible treatment plan. First example: Two remaining mandibular canines in good periodontal condition should be retained by fabricating a remote overdenture to preserve the ridge and provide better retention. On the flip side, let's explore the situation of two remaining maxillary first premolars. Regardless of their periodontal condition, retaining those teeth for a remote overdenture will accomplish little. Most maxillary dentures provide proper retention, and the location of those abutments is not critical for ridge preservation. If the patient insists on retaining those abutments, if their periodontal condition is maintainable, and if cost is not an issue, then they can be retained under a remote overdenture; otherwise, a complete denture is the proper treatment plan.

Next scenario: one mandibular canine remaining with about 50% bone loss. If two canines were present with this compromised bony support, the treatment plan would be more challenging but I would still likely recommend the implant overdenture. However, with only one canine present

it makes no sense to retain it and place one implant. True, this is a strategic tooth, but this compromised canine can jeopardize the long-term success of the dental implant. Removing the remaining canine and placing an implant in each of the canine positions makes more sense.

The list goes on: unilateral three-unit maxillary fixed partial denture, remaining four overerupted and uneven mandibular incisors, one maxillary canine—these are just few examples in which trying to retain the natural dentition will render a cumbersome, less predictable and more expensive treatment.

One must also take into consideration the fact that the maxillary and mandibular arches are not separate entities for treatment planning, but, rather, part of one functioning complex. A common clinical situation I have encountered is one in which the patient is about to lose all his/hers mandibular teeth and has quite a few teeth remaining in the maxillary arch that require extensive treatment. It is absolutely wrong to invest the time and financial resources to reinforce the maxillary arch while fabricating a complete mandibular denture. A well-restored maxillary arch opposing a complete mandibular denture is of little use to the patient; preserving the natural dentition in such a case accomplishes nothing. If the financial resources are not limited, the mandible can be restored using dental implants, and the maxillary teeth can be retained and restored. However, if the financial resources are limited, they should be allocated to first restore the functionality of the mandible with dental implants rather than restoring the remaining maxillary dentition.

A patient's wishes and desires always come first, but when retaining isolated teeth will decrease treatment predictability and increase cost and complexity, the patient needs to be informed of such and presented an alternative treatment plan that considers both dental arches, and, therefore, the patient as a whole.

Avishai Sadan, DMD
Editor-in-Chief
Avishai.Sadan@Case.edu