Orthodontists needed on the implant team

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The use of osseointegrated implants is now accepted as a predictable treatment modality for an ever-increasing segment of the population. The success rate for single tooth implants 5 years after placement is 96.3% according to a study by Haas (J Prosthet Dent 1995;73:274-9). Most patients who receive implants today do not have their malocclusion corrected first. This is not a practice that we, as a specialty, can point to with pride. The lack of orthodontic input into the diagnosis and treatment planning for patients with major dental or skeletal problems can be a major disservice to a community in need.

There are two primary reasons to consider the use of implants when planning orthodontic treatment: to replace missing teeth and to provide anchorage when several teeth are missing in a very complex malocclusion. The orthodontist's understanding of growth, development, and long-term stability is the missing component of what is frequently an elaborate plan for dental care. This raises a number of questions.

Is there any reason to place implants before orthodontic treatment? According to Ward Smalley, there is one: "...when they are needed for anchorage...teeth can be moved like never before when implants are used for anchorage."

At what age should implants be placed? Implants should not be placed until all growth has ceased. The lack of continued skeletal growth must be verified before proceeding. The eruption of all permanent teeth is not good enough.

Should a primary molar be extracted early when the permanent tooth is congenitally missing? Probably not, in most instances, to help maintain as much of the alveolar bone width as possible. But, if ankylosed, the primary tooth should probably be removed to help maintain vertical bone levels.

If the patient chooses to delay placement of an implant following the completion of orthodontic therapy, will the alveolar ridge continue to narrow with the loss of bone? Vince Kokich does not see this as a major problem; he believes the ridge changes very little after the original healing process. He does propose using a heavy wire with mesh pads as a bonded retainer for missing posterior teeth until the patient is ready for the final restorative care.

I know of few orthodontists who have not desired greater interaction with the broader dental community, and it hasn't always happened. With the explosion of technology and the increased use of osseointegrated implants, better communication and the sharing of treatment goals is not only desirable, but mandatory.

The case report in this issue of *The Angle Orthodontist* (page 167) is a good place to start. Nile Sorenson describes how he used maxillary implants for Class II elastic anchorage to increase anterior vertical dimension prior to replacing six anterior teeth with a fixed prosthesis. This case is typical of the unique challenge facing clinicians who believe in providing excellence for their adult patients.