What you didn't learn in dental school: space maintenance

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When I was in dental school, we were taught virtually nothing of orthodontics. We were certainly not taught how to integrate appliance therapy into our practices. We were taught the basics, but never to the extent that we could actually hope to perform the procedures ourselves. We were taught how to make referrals instead of solve problems.

The unfortunate truth is that nothing has really changed. The average dentist today feels ill-equipped to take care of basic orthodontic problems. As a result, they lose professional ground, are denied the economic opportunity to advance their practices, and end up costing their patients more money for care and treatments.

The goal of appliance therapy is to provide the best, most economical care possible over the lifetime of the patient — while providing the dentist the opportunity to offer needed therapy and make a good living. These are not mutually exclusive concepts. In this article (and articles to follow), we’ll examine how this works and how it can build practices.

Growth, development, and early orthodontic treatment problems don’t get better on their own. Unfortunately, when you can’t recognize the problems — or feel that you can’t address the problems — you certainly can’t treat or refer these cases early on.

For example, if a patient has lost teeth early, it is important to either maintain the existing space or regain any lost space. Failure to intervene will cause crowding in the adult dentition.

Space management ... what you need to know

• Space management is often the simple key to preventing a serious malocclusion in the permanent dentition.
• Maintaining and regaining space are relatively easy procedures.
• Ignoring these procedures makes things worse.
• Supervised neglect — the default position for all too many dentists because they haven’t been trained but they have been taught to fear orthodontics — is not an option.
• Follow-up appointments are generally needed only to monitor patient growth.

What teeth need to be replaced? Children must be evaluated for missing primary teeth in order to determine if any space maintenance is necessary. As a general rule, it is recommended that all space created by missing primary teeth be maintained.

The transition period. The adult cuspid and two premolars will erupt during the transition period from the deciduous to the permanent dentition. The space available for their eruption and final position is limited by the position of the first permanent molar and the lateral incisor. If, for example, a child is brought to you six months after a tooth has already drifted forward, a mixed dentition analysis should be performed to determine if the dental arch still contains enough room to accommodate the yet unerupted permanent teeth.

How to do a mixed dentition analysis. You will need a set of study casts, a Boley gauge, and a mixed dentition analysis worksheet. Advantages:

1. User-friendly (beginner or expert)
2. Time-efficient
3. No special equipment or radiographic projections required
4. Easily done in the mouth or on dental casts
5. Applicable for both dental arches

What appliance(s) to use and when. Use of a simple space maintainer or space retainer after the early loss of primary teeth is one of the more common clinical procedures in interceptive orthodontics. Although these procedures can be done with either fixed or removable appliances, fixed appliances are preferred in most situations because they eliminate the question of patient cooperation.

Early space management is the most economical for the patient long term, and the dentist gets to make a good living while doing it. It doesn’t make any sense not to do it.