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# Hygiene and the Orthodontic Patient

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**H**ygienically challenged patients are the bane of an orthodontist's professional existence. It is difficult to be proud of even perfectly aligned teeth when they are marred by decalcification<sup>1,2</sup> and periodontal problems due to inadequate hygiene.<sup>3-11</sup> When numerous appeals to both patient and parent are of no avail, removal of the appliances may even be necessary for optimal dental health.

There are a number of articles comparing the effectiveness of different types of brushing tools and techniques for orthodontic patients.<sup>12-14</sup> Most orthodontists are aware of the latest products and have tried them with their patients—yet hygiene difficulties remain.

In my office, we have established a comprehensive, systematic approach to oral hygiene, acknowledging that for many patients, proper care will always be a challenge. The program is an integral part of our treatment, beginning with the initial examination. The steps and techniques presented here can be modified for the individual patient or orthodontist.

## Patient Instruction

Some patients are self-motivated to have excellent hygiene with minimal input. Most, however, need to know why good home care is important. Pictures of poor brushing and pictures

of excellent treatment results with good brushing vs. poor brushing are useful visual aids. Videotapes, which can be checked out and taken home, are also helpful.

Sometimes a particular assistant or doctor will “click” with a patient. We make it a point to have that individual work with the patient throughout treatment to improve the level of oral hygiene.

We give initial instructions at the bonding appointment or when spacers are placed, using a “tell, show, and do” technique:

1. TELL patients how to brush using language they will understand.
2. SHOW patients how the brush should be angled so they can reach difficult areas.
3. Have patients then DO the brushing technique we have shown them, making sure they angle the brush properly and get all the areas they might have missed in the past.

Ideally, the parent would only need to be informed of these instructions. In our experience, however, the parent should be checking and monitoring the hygiene of a child 8 years old or younger. It is *not* reasonable to assume that a child this young will have satisfactory hygiene.

If we find we are not successfully communicating with a patient, we place him or her on biweekly-to-monthly hygiene recalls before starting treatment.

## Brushing Instructions

1. In the hygiene instructions, emphasize the exposed portions of the teeth between the brackets and the gingiva, particularly on the mandibular incisors and the maxillary lateral incisors and cuspids.
2. Tell the patient when to brush: in the morning, in the evening, and after eating.
3. Tell the patient to use a three-minute timer to ensure brushing for a full three minutes.



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4. Instruct school-age patients to use a travel toothbrush after lunch.
5. Tell and show patients how to brush. If they have trouble getting into certain areas, demonstrate the use of a Proxabrush or sulcus brush.
6. Suggest the use of a hand mirror while brushing. Because it can be held close to the teeth, the patient may be able to better see the plaque that needs to be brushed away.

### Flossing Instructions

We demonstrate flossing techniques and emphasize the benefits of flossing to every patient at the initial bonding appointment. Although we place more emphasis on brushing until patients master those techniques, we review flossing at subsequent visits.

Both adults and children can be shown how to use floss threaders successfully.

### Hygiene During Treatment

Excellent hygiene depends on patients' motivation to perform the necessary steps for cleaning the teeth, which may be in competition with their other activities and desires. School performance frequently correlates with patients' self-motivation. How often have we heard a patient's parent say, "This is a difficult period for Steve in all his activities"?

We usually schedule new patients every two weeks for a two-month period to check their brushing and cleaning. Because of the inconvenience of these appointments, the parents tend to be highly interested in the progress their child is making.

Various grading systems exist,<sup>15</sup> but to keep it simple, we use a 1-4 method:

- 1 = Excellent with minimal plaque and inflammation.
- 2 = Good, with several isolated areas showing plaque and food.
- 3 = Needs improvement, with multiple areas of plaque and inflammation.
- 4 = Generalized plaque in and around the appli-

ances, revealing minimal hygiene.

Poor hygiene requires remotivation and reeducation with the "tell, show, and do" technique. This education should be checked by a quality-control procedure until hygiene improves.

### Tips for Increasing Compliance

1. Consider recommending four cleanings per year with the family dentist. It is important to first check with the dentist to ensure that he or she is in agreement.
2. Call the family dentist and find out when the next checkup is scheduled, then remind the patient about the appointment.
3. Generate positive and "need to improve" letters for both patients and their general dentists.
4. If a patient has hygiene problems, ask the family dentist to reinforce the importance of brushing at regularly scheduled appointments.
5. If there is still a problem with hygiene and treatment cannot be terminated due to other circumstances, remove the anterior brackets and seal the surface of the enamel with a lingual bar-type adhesive. The brackets can be then be reattached.
6. Recommend an oral irrigator as a useful adjunct for removing food from braces.
7. Recommend electric toothbrushes for both children and adults. These are especially useful because of the built-in timer<sup>16-17</sup> in brands such as Interplak,\* Braun,\*\* and Sonicare.†<sup>18-25</sup>
8. Give out toothbrushes to new patients. Allowing patients to choose their own makes them feel special. Brushes can be customized by cutting some of the bristles away, which adds an extra bit of personal attention.
9. Have patients sign an agreement that encour-

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\*\*Registered trademark of Oral-B Laboratories, Inc., 1 Lagoon Drive, Redwood City, CA 94065.

†Registered trademark of Optiva Corp., 13222 S.E. 30th St., Bellevue, WA 98005.

## PATIENT COOPERATION AGREEMENT

In order to obtain the best possible results in my orthodontic treatment, I, \_\_\_\_\_, understand that my cooperative efforts are just as important as the efforts of Dr. Burkland and his staff. The doctor provides the treatment plan, and it is my responsibility to follow his instructions so that I may have beautiful, healthy teeth that will last a lifetime. I will have done my part when I have taken responsibility for the following:

- 1. Clean teeth and gums:** I will clean my teeth and gums properly three times a day, especially after eating meals or snacks.
- 2. Wearing appliances:** I will wear my headgear or other removable appliances faithfully as directed by the doctor and staff.
- 3. Care of appliances:** I will not eat any foods or get involved in any activities that will damage my appliances and delay my treatment.
- 4. Appointments:** I will try to keep all my appointments and arrive on time. I will call as soon as possible if I must change my appointment, and always call ahead of time if I have something broken or loose. I will take my fair share of appointments during school hours.

As an orthodontic patient receiving treatment in the office of Dr. Burkland, I agree to cooperate by following all of the above instructions.

\_\_\_\_\_  
Patient's signature

\_\_\_\_\_  
Date

**Fig. 1 Patient cooperation agreement.**

ages their cooperation in their treatment (Fig. 1).  
10. Create a positive contest that encourages children or adults to strive for excellent hygiene, to be on time for appointments, and to use their appliances as instructed. In our office, we have a Wooden Nickel Contest in which patients doing well in all three areas receive a maximum of three wooden nickels. They can then exchange these for small gifts listed on a bulletin board.

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