THE READERS' CORNER

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(Editor's Note: The Readers' Corner is a quarterly feature of JCO in which orthodontists share their experiences and opinions about treatment and practice management. Pairs of questions are mailed periodically to JCO subscribers selected at random, and the responses are summarized in this column.)

1. How many transfer cases into your practice do you normally have in a year?

Thirty-five percent of the respondents said they had between one and four transfer patients per year, 31% reported five to nine annual transfer cases, 17% reported 10-19 cases, and only 10% had 20 or more. Only a few clinicians reported less than one transfer patient in a typical year. More than three-quarters of the respondents indicated that the number of incoming transfers had stayed the same compared to the previous year, while approximately equal percentages of the remainder reported increases and decreases.

Describe your protocol for deciding whether to accept a transfer case.

Transfer policies included such common procedures as obtaining records from the previous orthodontist, using the AAO transfer form, and calling the referral source. Responses included:

• "I see a patient for a first visit, hopefully with original records in hand, to evaluate the patient/parent attitude. I rarely recommend they see another orthodontist, but I reserve the right to make that judgment before doing anything. I would never refuse to take on a patient because I don't like the previous treatment. We all have cases that are not going well and then they transfer."

• "We accept all cases. We may have to strip the case and rebond or perhaps modify the original treatment plan, but we feel that all patients should be able to hear what we feel is best for them."

• "If the patient is moving from another town, I make every effort to accept the transfer. If the case is from a local orthodontist, I encourage the patient to try and finish with their orthodontist."

• "I look at the AAO transfer form to see what the previous orthodontist wrote about the patient. If there is not a form, I call the previous orthodontist. Sometimes they don't know the patient has moved or is transferring!"

• "I rarely accept unless an orthodontist calls me personally. If a new family moves into town with multiple family members who need treatment, I will consider accepting the transfer."

• "We almost always accept transfer cases, even if it's just to deband. I figure it's not the kid's fault that they moved. We often take a hit financially, but unless there is a compelling reason, e.g., they refuse to brush their teeth or follow our instructions, we take care of them. If it's a financial issue, we use our 'Dental Access' program, which allows them to trade community service for orthodontics (our version of 'Smiles 4 a Lifetime')."

• "We consider the kind of brackets (we use self-ligating brackets) and the condition of the case. If it has been poorly treated or the patient has been less than cooperative, we tell them that they will have to be debonded and rebonded with our appliances. If the case is within six months of finishing and is in good shape with whatever bracket system, we will finish without rebonding."

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• "I accept all transfers in the same way I would hope that when my patients move, they would readily be accepted by an orthodontist in their new location."

Are your transfer procedures different for Invisalign cases?

About half the respondents reported that their transfer procedures were no different for Invisalign cases; 30% changed their transfer protocols, and the remaining practitioners did not treat Invisalign cases. Some specific comments:
• "You need the make the transfer with Invisalign directly."
• "Because case refinements are inexpensive, I might be more likely to change aligners than I would be to change braces."
• "With outgoing Invisalign transfers, if the case has been going well, the patient has been compliant, the aligners are tracking well, there are no midcourse changes in attachments or any interproximal reduction, then we will usually give the patient the remaining aligners, reinforce instructions in self-monitoring to ensure teeth are tracking, and let them continue their treatment on their own. Usually we'll ask them to go on a schedule of three weeks per aligner to ensure tracking. When they've finished treatment, they should contact their dentist to remove any attachments. We provide them an Invisalign retainer at the end of treatment."
• "I do not accept Invisalign transfers. I have tried! Easier on me to say no."

In what situations would you not accept a transfer case?

Reasons for rejecting transfer cases involved financial difficulties, treatment complications, poor patient attitudes, and unreasonable expectations for the quality of results in the anticipated time remaining. Representative remarks included:
• "If a patient is unhappy with a local doctor and I do not think the reasons for changing are valid."
• "I don't accept a case when I cannot agree with the treatment being performed or feel that I cannot achieve a satisfactory result for the patient. Also, when the patient has come to me for an opinion on the treatment being performed, I recommend that they are best served by having the original orthodontist finish treatment."
• "I'll decline if they are planning another move before we can finish the case."
• "I stopped accepting transfer cases since the majority were a headache. Typically a lot or all of the fee had been paid with still a lot of work to be done, making us look like the bad guy. As we do not want to criticize the previous orthodontist, it makes for a difficult transfer. After 20 years, we decided it's best to stop accepting transfers after being burned too many times."

Do you ever have trouble acquiring records from the previous orthodontist?

Ninety percent of the respondents had little trouble getting records for transfer patients. Some pertinent comments were:
• "We will have trouble acquiring transfer records if the patient/parent left the previous orthodontist under bad terms. Either they have not paid their bill properly, or the patient/parent has some personal conflict with the prior orthodontist. This has not happened very frequently."
• "We sometimes have trouble, either in timeliness or poor form—e.g., a photocopied version of a pano."
• "I review the other orthodontist's initial records, but always take my own records before continuing treatment. I want a record of how things were the day I become responsible for the case."
• "We ask for an AAO transfer form and ask that the photos and radiographs be transferred through Dolphin Imaging's 'Dolphin Anywhere', a free program available to any Dolphin Imaging user. It is easy to use and pastes right into my imaging software with no loss of resolution."

What do you do if an incoming transfer case has been misdiagnosed, in your opinion?

Many ways of handling this situation were listed, but the strongest recommendation was not to criticize the original orthodontist. Specific responses included:
• "Share my opinion honestly. Try not to say anything negative about the transferring ortho-

dontist. I can usually find a positive spin to put on a situation, for example: 'He/she was trying to see if you could be treated without the removal of any permanent teeth'."
• "I call the previous doctor first to explain what I am about to tell the patient. We try to find common ground and the best way to explain the need to change treatment course."
• "It is important to remember that a true misdiagnosis is rare, because there may be more than one option for treatment, and that we all have cases which are not turning out as well as we would like. Also, since we were not present when the case presentation was made, we cannot know what the patient was told. For that reason, I always try to get permission to speak to the original treating professional. If permission is refused, I would possibly refuse to accept the patient as a transfer."
• "I hate to see patients who are overcharged for what has been done to date. For example, when a doctor collects the entire fee, but the patient still has six to 12 months of treatment remaining (through no fault of their own). I also see sloppy records, diagnosis, and appliance placement, and it makes me feel that our profession has a long way to go."

What do you do if you believe an incoming transfer case will be difficult or impossible to finish to acceptable standards? What if the patient has been in treatment for an extended time and there is no end in sight?

Strong opinions were voiced on this subject, generally focused on scaling back goals and modifying treatment plans to achieve the best possible results. Some comments were:
• "I tactfully explain that in my opinion we should change expectations and review limitations. And sometimes I suggest we remove braces and accept what they got."
• "Have the patient sign a release, deband, and send the general dentist a letter of explanation."
• "This is a tough one. Be honest with the patient about an expected outcome. Encourage another opinion from another orthodontist. Be straightforward about treatment time and expectations."

Describe your protocol for patients who are transferring out of your practice.

The most common procedures were to give specific instructions to the patient to avoid confusion, complete a transfer form for the new clinician, and refer to the AAO directory for available orthodontists in the new area. The following comments were added:
• "I complete the transfer form, get records ready to give the patient at their last appointment, give the patient names of orthodontists in the new location if I am familiar with them, and sometimes phone another orthodontist to see if they accept transfer cases. If I don't know anybody, I recommend that the patient ask around once they get to the new area."
• "We prorate our fees according to the following schedule: 25% of the total fee is for records, diagnosis, and placement of appliances. The remaining 75% is divided by the anticipated number of months of treatment to arrive at a fee per month. This is multiplied by the months that we actually treated the patient and added to the 25% to arrive at a total fee for services rendered."
• "We typically do not charge for release of records. They are all digital and easy to e-mail."
• "We fill out the AAO transfer form. Increasingly, we take photographs as a record of where we left off. We also have a form we use to determine where we are in the contract and whether either party still owes money."
• "We should prepare patients being transferred that different orthodontists might have different treatment philosophies and opinions and fee structures. No matter what causes the transfer, extra cost is expected to finish the case, just as when one moves his home to a new place. Even if the same treatment plan will be followed, extra time, work, and cost are involved for records and clinical assessment. Reasonable compensation is justified."
• "Let's put our egos behind us if the case still has some work and prepare the patient to hear a more realistic remaining treatment time. Talk about more costs so the patient is not shocked, and let them know why. At the end of the process, it is about the patient getting the best result and

feeling good about the treatment they have received—in both offices."

What aspects of your practice affect the transfer of patients into and out of your practice?

A few representative remarks:

• "If a patient comes in wearing appliances I am not able to work with, I give the patient the choice of either finding an orthodontist who uses the appliance or placing my own appliances."
• "I use self-ligating appliances, which may or may not be used by a new orthodontist. If I know that a patient is moving, especially overseas, I will place conventional twin appliances to make the transfer easier."
• "I use the Herbst appliance, and I tell the patients that if they are in the middle of treatment they should find an orthodontist in the area who is familiar with that appliance (this has rarely happened). Otherwise, I use straightwire appliances and I do Invisalign. I will look for an Invisalign provider in their new location."
• "Lingual braces have been the only real tough transfer; not a lot of folks use them. We have used temporary anchorage devices for a long time; for TAD cases, I explain that they may want to check with some of the orthodontists in the area that are comfortable using them."

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2. Have you ever had a patient who swallowed an orthodontic device other than elastomeric separators?

Sixty-five percent of the respondents indicated that "one or a few" of their patients had swallowed orthodontic materials. Fifteen percent said they had "more than a few" patients who had done so, but 20% reported no patients who had swallowed such devices. Some interesting comments were:

• "A lot of patients seem to worry about it, but I have never known of it to happen."
• "I consider the appliance swallowed if they don't have it and they don't know what happened to it."

What have your patients swallowed?

Brackets were by far the most commonly swallowed devices, cited by 75% of the respondents. These were followed by pieces of clipped archwires (35%), molar bands (33%), bonded retainer wires (16%), and ligature wires (9%). Swallowed materials listed by only a few respondents included wire separators, removable and fixed appliances, broken pieces of removable appliances, and removable retainers. Items not listed on the questionnaire, but written in, included burs, cotton rolls, Forsus pins, and transpalatal bars.

Describe how your patient swallowed the device.

Fifty-eight percent of the respondents described incidents that had occurred during office exams or adjustments:

• "It was usually a band, and we retrieved it before it got into the airway."
• "A bur flew out of a handpiece and down the patient's throat."
• "A patient swallowed a cotton roll while we were cementing a lower fixed appliance."

Nearly 40% of the respondents mentioned swallowing incidents that had taken place while patients were eating or drinking:

• "Several of my patients have reported this. Typically a second molar bracket becomes loose and slips off the distal aspect of the archwire."

Another 26% of the respondents reported swallowing incidents that had occurred while their patients were sleeping, resting, or doing nothing in particular:

• "A patient arrived with a missing bracket and was not aware that it was missing."
• "Patients lose molar brackets all the time and have no recollection of losing them. I assume they must swallow them."
• "Most of my patients would fall under this category. Many times patients are not sure if they swallowed the appliance or if just came off and out of their mouth."

Only one clinician indicated that an expander key might have been swallowed while advancing an expander; this respondent now advises

parents to secure the keys with dental floss during activation. A smattering of replies indicated that orthodontic devices were swallowed while laughing, talking, singing, playing sports, or exercising, but an apposite precaution was mentioned by one respondent: "Patients have taken a baseball to the face, and an elbow to the face during basketball. Mouthguards are free here, but they have to wear them!"

Have you ever had a patient who aspirated an orthodontic device? If so, what did they aspirate?

Fortunately, aspiration of orthodontic devices seems rare, with only one respondent reporting the following incident:

• "A piece of copper NiTi broke and lodged in the patient's pharynx and had to be retrieved in the operating room. After this episode, the manufacturer retrieved the broken section and the remaining portion in the patient's mouth and determined that the wire was scored by the pliers used to seat the wire and the wire subsequently fractured at the site where it was scored. The manufacturer changed its recommendation on handling these wires as a result of the incident, and I retrained my staff on proper handling of these wires. When seating copper NiTi wires, we now use instruments that do not score the wire, or we pull the wire into the bracket with dental floss."

Please describe any incidents involving swallowing or aspiration of a device and indicate how the situation was resolved.

Several clinicians said they referred the patient to a radiologist for a chest x-ray if it was not certain that a device had been swallowed rather than aspirated. A few referred patients to their family physicians, one to a thoracic surgeon, and several to hospital emergency rooms. Some specific instances were:

• "An assistant cut a distal end without using a cut-hold end cutter, and the patient swallowed the fragment. It stuck in his throat. ER personnel took an x-ray of the throat area, but they did not understand what to look for, and the image of the wire fragment was very hard to see on the film."

• "I referred a patient who swallowed a removable cuspid-to-cuspid retainer to a radiologist. It did not show up on film."

• "I once took an x-ray of a patient's oral area and found a missing bracket embedded in the soft tissue."

• "I have referred a patient to the hospital for follow-up after swallowing a band. They found it in the patient's stomach and recommended no treatment, anticipating it would pass through the digestive tract."

• "With bands that were swallowed, I had the patients monitor their stools and told them that 99% of the time they would pass the band without any complications. After one band swallowing, we gave the patient some bread to chew up and swallow to help the band go down."

What precautions do you normally take during patient visits to ensure that devices are not swallowed or aspirated?

Although six respondents reported taking no particular precautions, the vast majority mentioned procedures such as the following:

• "We tie floss to transpalatal arches when trying in. My assistant always has high-speed suction ready during banding/bonding appointments."

• "With moderate-size items—e.g., TPAs—I have tied floss to them. However, I have to admit that since I have not had many problems with losing them, I have been more comfortable securing items with hemostats or Mathieu pliers, without redundant floss ties."

• "We use throat screens of 2×2 gauze when placing or removing TADs."

• "We place a cotton roll over the end of a wire when cutting off the excess, even if using a 'grabber'-style cutter. We warn patients not to move or swallow if anything is accidentally dropped in the mouth until it can be removed or the patient can sit up and lean forward to spit it out."

• "Have the patient lean to the side while bonding second molars."

• "We probably all need a reminder about improved caution in this area. It only takes one incident to result in a situation that can justify the precautions. Just this week as I sat down to check

an assistant's work, I saw a piece of a clipped archwire that was around 1cm long and sitting on the tissue just distal of the lower 7s, that I quickly retrieved. The body's ability to process and pass many surprising items is amazing, but we certainly do not need nor want to test its limits."

What precautions do you normally take to ensure that patients do not swallow or aspirate devices after they have left your office? Do you ever limit your use of removable appliances due to the risk of swallowing or aspiration?

Eight clinicians reported taking no special precautions, but many noted that they didn't prescribe removable appliances that were small enough to be swallowed or aspirated. Typical procedures included:

- "Removable transpalatal arches always tied in to the sheath with Alastiks or steel ligatures. Patients are told to contact the office immediately if they feel any appliance, removable or fixed, is loose or not fitting right."
- "I tell patients to remove small retainers while eating and any removable retainer while playing contact sports."
- "No brackets on the teeth unless engaged in a wire."
- "We check the occlusion so that the brackets are not in functional or centric contact with the opposing dentition."
- "We instruct a patient with a fixed lower lingual retainer to call immediately if even one bonded attachment comes loose, as the wire then becomes a strong lever arm and can cause other bonds to loosen and even allow the entire appliance to detach."
- "I don't use any removable appliance that is not at least 6-6. Also, patients are told to not wear any removable appliances when playing sports."
- "I don't use small removable appliances to be worn at night. I avoid using a removable appliance if the fit is not great due to erupting teeth."
- "I only use removable appliances that are too big to be swallowed or aspirated. Also, they are warned to call immediately if anything is broken or even cracked. If they think there is a danger of a broken appliance being swallowed or aspirated, they are to leave it out until I can see them."

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