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 times per year, on average, do you see current patients affected by dental trauma?

Most respondents reported seeing dental trauma in zero to five current patients per year. About a third of the clinicians reported a range of six to 10 or 11-15 incidents. Only one respondent indicated seeing 16 or more incidents per year.

How many times per year, on average, do you see former patients or non-patients who need dental treatment due to trauma?

The average respondent saw former patients or non-patients affected by dental treatment 2.5 times per year. Fully 85% reported zero to 5 incidents, with the remainder seeing six to 13 trauma patients.

What have been the most commonly seen causes of dental trauma?

The most frequent cause of dental trauma by far involved contact sports such as football, hockey, and martial arts. Next was participation in non-contact sports such as baseball, basketball, and soccer. Other causes of dental trauma listed



Dr. Sheridan is an Associate Editor of the *Journal of Clinical Orthodontics* and a Professor of Orthodontics, Jacksonville University, 2800 University Blvd. N., Jacksonville, FL 32211. by respondents included falling, walking into doors, falling out of trees, incidents during sleepwalking, trampoline accidents, cheerleadingrelated incidents, roughhousing with classmates or siblings, and "injuries from doing stupid things at school, at home, or outdoors". Recreational activities such as skating, running, and swimming were also mentioned, as were accidents involving automobiles, bicycles, or motorcycles.

Describe the most unusual or extreme cases of dental trauma you have seen in your practice.

Some of the responses to this question were tragic, while others were quite colorful:

• "A patient had his braces removed in the afternoon and all four maxillary incisors and the labial plate of bone eliminated from an elbow blow that evening."

• "After a basketball game, my patient removed his mouthguard before shaking hands and was punched by an opponent, knocking out both upper centrals."

• "Years ago a patient got her backpack strap caught in the spokes of the front tire of her bike. She went tumbling over the front of her bike and landed on her front teeth. She fractured the anterior of the maxilla, but not her teeth. Still, the case turned out beautifully!"

• "A patient was 'skateboard surfing' (lying down, going head first) in the street, hit a car, broke his neck, and is now a quadriplegic."

• "One patient had an upper lateral incisor knocked out by a friend swinging a steel water bottle."

• "A fumbled baseball struck the frontal midface of a shortstop and degloved the maxilla."

• "The most extreme case in recent memory was a patient who was training for a triathlon and fell off his bike. He had subcondylar and mandibularbody fractures."

• "A patient was jumping on and off bleachers as part of a gym class and tripped, traumatizing the anterior maxilla."

• "A young male walked into a friend who was swinging a baseball bat, causing exfoliation of three maxillary incisors."

• "The loss of the entire maxilla after drinking a caustic chemical as a toddler."

• "A patient in a bicycle accident experienced five avulsed lower anterior teeth, damage to the buccal plate of the alveolus, a torn lower lip, partial avulsion of two lower and three upper anterior teeth, three crowns fractured to the level of the pulp, numerous chips and cracks on posterior teeth, plus lots of gravel and dirt in the open wound."

• "A dog bite caused a large laceration of the upper lip, bending the stainless steel archwire. Teeth were displaced due to the trauma and the resultant bend of the archwire."

• "A patient fractured all four maxillary incisors riding a mechanical bull."

Do you encourage your athletically involved patients to wear mouthguards? If so, for which sports?

About 80% of the clinicians always encouraged the use of protective mouthguards, while the remaining 20% sometimes recommended their use. No respondents indicated that they rarely or never suggested mouthguard protection.

Those who "always" recommended mouthguards emphasized their use in any contact or collision sports. Many also highlighted activities involving the use of motion devices such as motorcycles, skateboards, and bobsleds. One clinician simplified the recommendation as follows: "Mouthguards are indicated in every sport where more than one player is on the field or court at the same time."

Respondents who "sometimes" advocated the use of mouthguards used the same rationale, but on a less restrictive basis. One individual comment: "I suggest using mouthguards for ice hockey, football, lacrosse, and field hockey. They should be worn for soccer and baseball, but they won't because it's not mandated for those sports in our state."

What type of mouthguard do you most commonly recommend?

Most respondents recommended more than one type of mouthguard, although prefabricated versions were the most commonly selected. Comments by those who preferred these mouthguards included:

• "Special prefabricated mouthguards of good quality will not snag on braces, and they fit all patients."

• "No adjustment is needed during orthodontics, while they allow the teeth to still move."

• "I prefer prefabricated because 'boil and bite' restrict tooth movement and customized types are cost-prohibitive."

• "Prefabricated looseness allows orthodontic tooth movement to occur. They are well accepted and relatively inexpensive."

Those who preferred "boil and bite" mouthguards commented:

• "Experience has shown them to be as good statistically as custom types, and they can be reheated after tooth movement."

• "They are easier for the patient to wear with braces."

Clinicians who preferred customized mouthguards noted:

• "We make them in my practice to fit over the braces."

• "They have a better fit, thus reducing the excess saliva."

• "They fit better and protect the alveolus."

• "They fit the best and thus are more likely to be worn."

Among those who used a combination of mouthguard types, individual remarks included:

• "I use prefabricated during braces, 'boil and bite' after braces. I find that customized mouthguards do not offer any advantage over 'boil and bite' mouthguards."

• "'Boil and bite' prevent further tooth move-

ment, as do most custom guards. Lately, prefab guards come in 'can yell' and 'can't yell' varieties. Custom guards are provided post-treatment."

• "'Boil and bite' during treatment, custom after treatment. 'Boil and bite' are replaced and reboiled frequently so teeth can move; customized after treatment for best fit and protection."

• "The more comfortable (better fitting, less bulky) a mouthguard is, the more likely a patient is to wear it."

• "The preference lies with the patient (comfort, costs, color)."

If you prescribe custom mouthguards, do you fabricate them in your own lab? If so, what fee do you charge?

About the same percentage of clinicians fabricated custom mouthguards in their own labs as those who did not. Fees varied substantially, with the average around \$150 and a range from no charge to \$500.

Please describe any visual aids or other motivational techniques that you have found particularly effective in encouraging your patients to wear mouthguards.

Respondents cited various methods for encouraging the use of mouthguards. Some representative comments:

• "I show every patient the photos of a former patient. This patient was elbowed playing basketball and had his mandibular anterior alveolar bone fractured and teeth rendered crooked. He was two to three months from being finished."

• "We have the large wall poster 'Save Face: Wear a Mouthguard' from the AAO."

• "In Sydney, Australia, most patients are very aware through public-awareness programs of the need for mouthguards. Our dental association, which represents about 95% of Australian dentists, provides new posters every year and encourages dentists to inform patients of the need for mouthguards."

• "For basketball, we point out professional players who are wearing them. For football and hockey, they are required in our district."

• "I tell the patient about how many times I've

had to come in to the office in the evening to reimplant or stabilize teeth that have been injured."
"We have hung posters in our office, but I don't think they are particularly motivating to the kids. I think the best I can do is to explain the risks/ benefits to them and to the parents. Most kids only wear mouthguards if their parents or coaches insist."

2. Do you have any significant hobbies or activities outside orthodontics?

JCO readers are an active bunch, participating in a range of recreational and artistic activities. The most popular sports, each engaged in by about a third of the respondents, were golfing and running/jogging. Next, at about 15% each, were boating, bicycling, tennis, skiing, and hiking. A handful of clinicians mentioned that they were scuba divers, water skiers, martial artists, or motorcycle/auto racers.

Less strenuous activities, reported by several respondents each, included gardening and landscape design, gourmet cooking, bird watching, flying small aircraft, and fishing. A few others engaged in volunteer work, photography, antiquing, renovating houses, painting, and travel.

Unusual hobbies included:

• "Outsmarting Wall Street."

• "Mall walking and stock-market speculation."

• "I am a part-time agent for a visual artist, and I do dental biometrics identification."

• "Scuba diving, underwater videography, and editing and burning of DVDs."

• "I am a gemologist, gem cutter, luthier (I build guitars, mandolins, ukuleles, and violins), and scuba diver."

• "Track driving a race-prepared 911 Porsche. This year I began Porsche Club of America's club racing on the famous U.S. road courses—Road Atlanta, Virginia International Raceway, Watkins Glen, Mid-Ohio, etc."

• "I am on our township library board and do jail ministry with a chaplain."

• "I'm a ham radio operator."

• "I play year-round tennis in multiple USTA leagues."

• "I am lead vocalist for a legend doo-wop group; we sing at concerts in Atlantic City and Westbury Music Fair."

A female respondent with lots of energy replied: "I golf madly. I play from men's tees with an 8 handicap. I also road bike, but golf takes away from long rides, so I would now rather golf than ride. I run during my lunch hour to clear my head three to four times a week. I used to play golf competitively when I was under 20, but now very rarely unless I am betting my husband or other guys."

How long have you been involved with these hobbies or activities, and how often do you participate in them?

The majority of respondents had been participating for many years or even decades—one chamber musician reported having played the violin for more than 70 years—and some managed to devote a significant amount of time to their activities.

An orthodontist who is an avid cyclist, longtime golfer, and weightlifter and had recently started yoga noted: "My doctor told me in order to not get frail as I get older, it's important to be limber. Exercise makes me feel good, and I do it as often as I can."

Most acknowledged that they were unlikely to turn professional in their sidelines, but virtually all said they would happily continue these activities into retirement. A few even looked forward to potential second careers after retiring from orthodontics:

• "I might become a karate or kickboxing instructor."

• "My wife and I are professional jewelers."

• "I will continue my hobbies. If any of them become my second career, it won't be for the money!"

• "My hobbies in antique autos and boats and classic motorcycles could become a second career."

• "I would like to teach part-time."

• "I might possibly give surfing lessons or become a personal trainer."

Before you became an orthodontist, did you have a career in a field other than dentistry?

Few respondents said they were employed in non-dental fields prior to orthodontic practice. Professions listed by these clinicians included publishing, medical research, teaching, accounting, and electronics.

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