

THE READERS' CORNER

JOHN J. SHERIDAN, DDS, MSD

(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. Please describe any special considerations involved in treating patients with lupus, hepatitis, HIV/AIDS, cerebral palsy, mental retardation, osteoporosis, and allergies (nickel or other).

The most common advice about dealing with these special conditions, other than following the required universal precautions, was to contact the patients' physicians, work with their recommendations, and request medical clearance from them for any orthodontic treatment.

For patients with potentially contagious diseases such as lupus, hepatitis, and HIV, many clinicians reported that they double-gloved and required their chairside staff to do so as well.

For patients with cerebral palsy or mental retardation, respondents suggested enlisting parental support, demonstrating extra kindness and patience, and limiting treatment to the most practical considerations. Since such patients usually have trouble with oral hygiene due to impaired motor function, some clinicians had the patients' general dentists place a fluoride varnish on the teeth and also prescribed mechanical toothbrushes such as Sonicare for more efficient cleaning.

Many of the respondents requested patients with a history of osteoporosis to have more frequent checkups with their periodontists because of their predilection for bone loss. They also suggested taking more frequent panorex films to monitor the possible pathology, and they tried to avoid treatment plans that would prolong treatment.

With allergies, the most frequent recommendation was to be aware of the patient's condition. This involved asking specific questions on the initial health questionnaire that would reveal allergies to specific substances. Many respondents noted that they had not encountered any nickel allergies in their patient population, but that their most common allergic problem was staff members who developed contact dermatitis due to powdered or latex-based gloves. These orthodontists made powder-free or vinyl gloves available to the chairside staff, although many noted that their staff members found vinyl gloves awkward to work with.

Which non-nickel products have you used, and how effective have you found them?

For relatively minor pretreatment problems, some clinicians said they would use Invisalign or Essix-type plastic appliances. Plastic or ceramic brackets and Teflon-coated archwires were also mentioned as alternatives to nickel. All of these products and techniques appeared to be effective.

Some interesting responses were:

- "If a patient has lupus they are often taking anti-inflammatory drugs, and there is some evidence that this may inhibit tooth movement."
- "When a patient presents with a history of

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Dr. Sheridan is an Associate Editor of the *Journal of Clinical Orthodontics* and a Professor of Orthodontics, Louisiana State University School of Dentistry, 1100 Florida Ave., New Orleans, LA 70119.

hepatitis, I limit treatment to emergency care until the patient is asymptomatic. This is a good time to review the status of staff vaccinations for hepatitis."

- "It is a good opportunity to emphasize to the staff the importance of sterilization, universal precautions, and that we should treat all patients as if they were HIV-positive. You never know. The patient might not be aware that he or she is HIV-positive."

- "It is mandatory that patients with osteoporosis have frequent contacts with their periodontist. Due to the decreased bone density, tooth movement will be faster and the relapse potential more acute."

- "When treating a patient with osteoporosis, I tell the patient to stop using all fluids such as milk, coffee, and tea because all are acid-producing and draw calcium, phosphorus, and magnesium from the body's calcium alkaline reserve. Also, I encourage them to eat green vegetables and to take calcium and magnesium supplements."

- "When treatment planning for a patient with a special condition, I will access Medline through the AAO Website to learn more about the condition. Also, I will often stage my treatment plan with a scheduled progress review before proceeding to the next stage. This allows a reevaluation before continuing into more complex phases of treatment."

2. Which digital camera do you use, if any?

Two-thirds of the respondents were using digital cameras, while most of those who did not noted that they planned to do so in the future.

Sony, Fuji, and Nikon manufactured the digital cameras most frequently used. Closely following these were the Dental Eye II, Vista-Dent, and Olympus 250A.

What are its advantages and disadvantages?

The advantages mentioned for all digital cameras were similar, the most common being that unlike 35mm photographs, the images could be evaluated immediately and, if flawed, could be taken again. Some mentioned the advantages of special features, such as the zoom for particulate imaging and compatibility with software (Nikon Coolpix), the ability to download to e-mail (Fuji), and instant imaging (Olympus).

How would you compare the picture quality of your digital camera with that of your previous camera?

The majority of respondents believed that their digital cameras' picture quality was as good as or better than that of their previous systems. These clinicians emphasized better resolution and detail, especially with a zoom function. Some clinicians felt that digital cameras were approaching equality with 35mm cameras. A smaller number thought their picture quality was only fair or not as good as that of the cameras they had used previously.

How do you store and retrieve the digital images?

The majority of clinicians stored their digital images on their computer hard drives. A few used computer software such as Orthoimages, and one clinician reported storing images on a Jazz drive.

Which digital imaging software do you use?

Although various software packages were mentioned, the most common was Quick Ceph. This was followed by Dolphin, Oasis, OMS, Olympus, OTP, and OrthoVision.

What are its advantages and disadvantages?

Only two clinicians believed there were no basic advantages over 35mm slides. One of these mentioned, however, that he would probably switch to imaging software when the products became more efficient.

Most respondents thought their imaging software was easy to use and produced immediate results. Quick Ceph was applauded because of its capability of performing VTOs, growth predictions, and treatment simulation, its straightforward cephalometric tracing procedure, and its user-friendliness. Olympus was mentioned because 55 images could be placed on a disk, and the Fuji 220 system because it could be easily integrated with other programs.

The most common disadvantage seemed to be the learning curve involved with using all the features of a program, especially Quick Ceph 2000. The compensation, however, was that there were multiple facets that any clinician could use.

The Sony program received the most negative comments, including the number of cards that had to be purchased and the inability to download right away. The Fuji 220 program was reported to have few significant upgrades, and the company was not responsive to at least one clinician's inquiries. One respondent stated that the computer locked up in certain functions when using the Coolpix program.

How do you use the images?

Most clinicians used the images for multiple purposes such as diagnosis, pretreatment records, and patient information. Other uses included patient consultations, correspondence with referring dentists, post-treatment consultations, and validation of insurance requests.

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- Dr. David P. Stangl, Hartford, WI