

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. Do you use a maxillary protraction device and, if so, how do you diagnose the need for it?

Ninety-six percent of the respondents reported that they used maxillary protraction appliances. Only two clinicians said they never used such devices. Diagnostic criteria centered around evidence of maxillary deficiency, determined by cephalometric analysis, clinical appraisal (as with anterior crossbites), or both. The cephalometric analyses most frequently mentioned were Steiner, Wits, and Downs.

A pertinent comment was:

- "We consider three elements: the patient's profile, the cephalometric evaluation of the A-P skeletal relationships, and the A-P and transverse dental relationships."

What protraction devices do you use?

Sixty-three percent of the respondents reported using the Great Lakes protractor. This was followed in decreasing order by the Delaire, Petit, Grummons, DynaFlex, and Ormco appliances. A few clinicians used Hyrax expanders in combination with snap-on plastic devices. One reported using a custom-made appliance based

on the Delaire method.

What is the optimal age for use of a protraction appliance?

All responses were in the range of 6 to 10 years of age, with the majority believing that patents age 6 to 9 would be the most amenable to maxillary protraction therapy. There were numerous comments that protractors should be placed "as soon as possible". Several clinicians felt that the optimal age was just after the first molars had erupted.

What success have you had with protraction appliances, and how do you measure success?

Clinicians apparently have had encouraging experience with protraction appliances. More than three-quarters of the respondents reported either "great" or "good" success, 22% reported "fair" success, and only a few cited "poor" treatment results. Some pointed out that the treatment effect of a protractor depended on the cooperation of the patient, as many clinicians used such a device in conjunction with a palatal expander.

Success was measured primarily by the clinical observation of anterior crossbite correction and the stability of the treatment result. This evaluation was usually supplemented by cephalometric verification, evidence of improvement in facial esthetics, and opening of the facial axis. It was often mentioned that the ultimate indicator of success with protraction therapy is the avoidance of maxillofacial surgery.

Typical remarks were:

- "I like to overtreat, so I like to leave 3-4mm of overjet and 60% overbite."
- "This has been a mixed bag because coopera-



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.

tion is always a factor. However, I have experienced positive results, especially when I use the appliance in conjunction with rapid palatal expansion."

Have you encountered relapse with a protraction appliance?

Nearly all the respondents said that at one time or another, they had seen relapse of maxillary protraction. One clinician answered, "Not yet". There were many anecdotal comments indicating that relapse was correlated with a continuing or excessive Class III growth pattern.

Some specific replies:

- "I usually have at least some relapse on these cases. That's why I overtreat."
- "I have had continued poor growth and have repeated treatment or have seen Class III growers outgrow the correction. I expect that the outcome in cases that show some degree of relapse would be much worse if no early treatment had been done."
- "Not unless the correction was dental rather than skeletal."

Do you use a mandibular retraction device (chin cup)?

A substantial majority of respondents (86%) said they never used mandibular retraction devices; the remainder reported using them occasionally. The primary reason given for not using such an appliance was its potential effect on the TMJ—in other words, apprehension about driving the condyle distally into the fossa.

Typical comments included:

- "I never use a chin cup because I'm concerned about the induced orthopedic forces against the TMJ that this appliance can generate."
- "I never use mandibular retraction devices, but I will use a vertical chin cup to close open bites after facemask therapy in Class III open-bite cases."

How do you diagnose the need for a chin cup?

The respondents who used chin cups generally diagnosed excessive mandibular growth with a relatively favorably positioned maxilla. This

diagnosis was generally based on clinical observation, backed by cephalometric analysis.

A pertinent response:

- "Most Class III problems are due to maxillary deficiencies. In cases of true mandibular prognathism, a chin cup will not retard mandibular growth, but may initiate a TMJ problem."

What is the optimal age or stage for using a chin cup?

The age ranges listed corresponded closely to those for maxillary protraction appliances. There was a general consensus favoring use in the early mixed dentition, with comments to the effect that the best results were achieved when the appliance was worn for as long as possible and as early as possible.

What success have you had with chin cups, and how do you measure success?

The respondents were not as sanguine about the ultimate success of mandibular retraction therapy as they were about maxillary protraction devices. Those who reported success with chin cups emphasized that the achievement of treatment goals seemed to be correlated with mild clinical problems and excellent cooperation. Many of the clinicians who never used chin cups said they had stopped using them due to a lack of success.

Have you encountered relapse with a chin cup?

All the clinicians who used chin cups reported some degree of relapse. The amount and frequency of relapse were not as apparent as with maxillary protraction devices, but on the other hand, treatment goals were less frequently achieved.

2. How do you assign patients in your scheduling system?

About half of the respondents assigned patients to "any available chair". One-third assigned patients "to a particular chair", and even fewer respondents assigned patients "to a doctor" or "to an assistant".

One orthodontist replied:

- "I assign patients to one assistant except the initial visit and study records. There is a primary assistant and a backup assistant if the primary is not available."

Do you assign patients to one assistant for all visits?

Ninety-four percent of the clinicians did not assign patients to one assistant for all visits. Explanations centered around the objection that such a system was too confining and inefficient.

How do you schedule first visits?

The most common response was "at the patient's convenience", closely followed by "at the office's convenience". Clinicians were four times as likely to schedule first visits during a "quiet time" rather than a "busy time", and were more prone to schedule "within one week of the initial call" rather than "within more than one week of the initial call".

One specific comment:

- "I usually schedule initial visits within one week unless asked by the referring dentist to see the patient immediately."

Do you schedule "like things at like times"? If so, why or why not?

Sixty percent of the respondents scheduled "like things at like times". Thirty-five percent did not, while the remainder employed a mixture of the two philosophies. The most prevalent reason for scheduling "like things at like times" was that this system seemed more efficient, and that there was more positive control of patient flow. The rationale for not scheduling "like things at like times" was that the system was too confining and inflexible.

Remarks included:

- "The schedule is broken up to maximize the doctor's time and to see as many patients as possible during the day. Therefore, some adjustment appointments are staggered, but some activities are grouped."
- "The doctor can most efficiently manage/delegate staff if we are focused on specific procedures. It's difficult and confusing to 'switch gears' all day long."
- "Personally, I get bored rather quickly doing like things at like times and have found that I can be just as efficient, and much happier, with creative scheduling."

Where are "next appointments" scheduled?

Eighty-one percent of the respondents scheduled their patients at the front desk, 11% scheduled at the chair, and 8% did both.

A typical comment was:

- "The appointment interval and time required are indicated on the patient's chart at chairside. The appointment is then scheduled at the front desk."

How do you schedule retention appointments?

The majority of clinicians scheduled retention appointments to fill open time slots, closely followed by individual appointments at any available future times. Only a few respondents scheduled retention appointments in blocks.

Do you use a reminder system for appointments and, if so, how do you make your reminders?

Two-thirds of the respondents used a reminder system for retention appointments, and 62% for regular appointments. About half of the clinicians who used reminder systems contacted patients by telephone (10% using TeleVox's HouseCalls program). The other half used regular mail, except for two respondents who used e-mail technology.

Some specific replies:

- "I use postcard reminders for retention appointments if the patient does not contact us within the suggested number of months."
- "I use a reminder system for retention appointments during the first six months only."

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Dr. Clifford L. Anzilotti, Wilmington, DE
Drs. Charles F. Bohl and Kevin T. Race,
Brookfield, WI
Dr. James M. Broadbent, Provo, UT
Dr. Paul M. Broadwater, Salt Lake City, UT
Dr. Saul M. Burk, Olney, MD
Dr. Ricky G. Caples, Monroe, LA
Dr. Jerry R. Clark, Greensboro, NC
Dr. Gary M. DaVirro, Solvang, CA
Dr. Suzanne M. Dennis, Charlottesville, VA
Dr. Bernadette DeSantos, Vancouver, WA
Dr. K. Buddy Donaldson, New Iberia, LA
Dr. Brian D. Eberhart, Mishawaka, IN
Dr. Debra F. Fink, St. Louis, MO
Drs. Anthony J. Furino and John M. Hamlin,
New Hartford, NY
Dr. Robert L. Garcia Ovalle, Santo Domingo,
Dominican Republic
Dr. Jon Golub, Fort Lee, NJ
Dr. Charles E. Gulland, Hermitage, PA
Dr. Liliana Hernandez, San Marcos, CA
Dr. Patricia L. Halloran, Bronxville, NY
Dr. Harold E. Hickam, Perry, GA
Drs. Thomas W. Jarrett and Daniel L. Foley,
Beckley, WV
Dr. Robert A. Kay, Marshfield, WI
Dr. Michael J. Kierl, Oklahoma City, OK
Dr. Suzanne King, Atlanta, GA

Drs. Marc S. Lemchen and Jennifer E. Salzer,
New York, NY
Dr. Robert P. Lorentz, Corinth, MS
Dr. Russell E. Little, Reno, NV
Dr. Mark S. Mappes, Nashville, TN
Drs. Richard T. McDaniel and M.M. Sternstein,
Springfield, IL
Dr. Robert C. McElhinney, Stow, OH
Dr. James W. Milne, Madison, WI
Dr. Patrick M. Ohlenforst, Irving, TX
Dr. Robert S. Portenga, Traverse City, MI
Dr. Scott E. Prose, St. Charles, IL
Dr. Diana T. Rose, Danville, CA
Dr. Thomas G. Rosenbarger, Portland, OR
Drs. Angela V. Ross and Sandra L. Law, St.
Louis Park, MN
Drs. Louis J. Russo, Jr., and Jonathan L.
Nicozisis, Princeton, NJ
Dr. Gary H. Schuberth, Barrington, IL
Dr. Michael D. Simmons, Statesville, NC
Dr. Christopher P. Swartz, La Mesa, CA
Dr. M. Jay Terzis, Madison, NJ
Dr. J. Douglas Thran, Clarks Summit, PA
Dr. Timothy J. Tremont, White Oak, PA
Dr. Patrick Turley, Santa Monica, CA
Dr. Greg A. Werner, Indianapolis, IN
Dr. James L. Wetzel, Jr., Casper, WY
Dr. Tommy N. Whited, Memphis, TN
Dr. Stanley P. Williamson, Edina, MN
Dr. J. Steven Zeh, Louisville, KY