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. What is the benefit of a cuspid-guided occlusion?

The majority of responses emphasized increased stability and a reduced likelihood of pathology such as TMJ disorders, accelerated attrition of occlusal and incisal surfaces, and severe bruxism. There were also indications that a cuspid-guided occlusion protected the buccal segments in lateral excursions of the mandible. However, there were a few respondents who felt there was no benefit that could be attributed exclusively to cuspid-guided function.

Can people function well without a cuspid-guided occlusion?

Even though most clinicians thought of cuspidguided occlusion as a treatment goal, every respondent also believed that patients could function well without it. The majority based their opinion on clinical observation. In other words, they had witnessed situations without cuspidguided occlusion in which the patients showed no signs or symptoms of occlusal dysfunction not only immediately post-treatment, but also



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long-term. Individual comments included:

- "Cuspid-guided occlusion is a goal to work toward. We get it if we can; if we can't, for whatever reason, I doubt it will generate any pathology whatsoever."
- "Cuspid-guided occlusion and group function are touted as acceptable schemes of occlusion. However, they are completely different. Anything in between these diametrically opposed options is thought to be unacceptable, even though there is absolutely no definitive research to support any of these entrenched positions. Very confusing."
- "I am not aware of any data that point toward pathology when cuspids are positioned next to centrals to compensate for congenitally missing laterals, and that's as uncuspid-guided as you can get."

Do you aim to influence the occlusal plane?

Sixty-five percent of the respondents said they tried to influence the occlusal plane. The remainder of the group said they did not, or only occasionally attempted to. The rationale of those who altered the occlusal plane was that it would improve stability and help control the upper lipincisor position, deep overbite, or open bite. Those who did not attempt to alter the occlusal plane thought not only that it was difficult to do, but that the stability of such correction was dubious. Comments of interest were:

• "I will never know if I can alter the occlusal plane if I don't try. It's like most treatment goals—sometimes I can accomplish them and sometimes I can't. But I'll give it everything I've got."

- "If the occlusal plane dips down anteriorly, I attempt to level it."
- "If changed, it eventually regresses to its approximate original position."
- "Surgery is the only way to permanently alter the occlusal plane."

How accurately do you think the hinge axis can be located?

The majority of respondents (68%) believed that the hinge axis could be fairly accurately located (within 1-2mm), if the recordings were obtained with a fully adjustable articulator. However, the remainder of the clinicians believed that the hinge-axis location could not be precisely determined, and further, that it should not be extrapolated to the point that it would change an otherwise conventional treatment plan. Replies included:

- "It must be confirmed repeatedly, and that's difficult to do without a tomograph and facebow recording."
- "It's like throwing darts at a target. It will vary with the operator. I doubt if any two clinicians would come up with the same determination."
- "Ron Roth can probably come close, but I'm not Ron Roth."

Do you believe the condyle can be distracted vertically from the fossa?

Two-thirds of the respondents believed that it was possible to distract the condyle from the fossa. The remainder thought it could not be distracted or didn't know.

Only two clinicians said they encountered distracted condyles frequently. Sixty-six percent of the respondents said they found this situation occasionally, while 28% indicated that they never encountered condylar distraction or could not be sure if the condyle, in fact, was distracted.

Is there an allowable amount of slide that patients tolerate and accommodate? If so, how much?

All the clinicians believed that some degree of slide was acceptable; differences of opinion centered on the amount. The majority indicated that a slide of 1-2mm was allowable, but responses ranged from less than 1mm to as much as 4mm. A considerable number of respondents (16%) also indicated that a slight anteroposterior slide was not as alarming as a lateral shift.

Is there validity to the concept of making CR=CO?

Even though all the clinicians stated that some amount of slide was tolerable, 62% believed in making CR coincident with CO, which would preclude any occlusal shift. The remaining 38% thought there was no validity to the CR=CO concept, or that it was highly questionable. Explanations included:

- "It is a goal to reach for. If we don't try, then anything goes."
- "This relationship should be thought of as a reasonable guideline, not an absolute for successful treatment."
- "I believe it contributes to a very stable, pathology-free occlusion that will enable the patient to function well."

Do you mount cases? Why or why not?

Eighty-two percent of the respondents, who mounted some or all of their cases, believed they had a better basis for diagnosis and for evaluation of finished results. Many reported that they mounted cases only in specific situations, such as signs or symptoms of TMD, surgical-orthodontic treatment, Herbst therapy, abnormal growth indications, or preprosthetic treatment.

Those who did not mount cases at all tended to believe that the mouth was the best articulator, and that an articulator reproduction of condylar movements was suspect. No one mentioned mounting cases because of medicolegal considerations. Some specific comments were:

- "Mounting cases is not an exact science, but it's all we have to work with if you care to get a better picture of what you have."
- "It doesn't give you all the information you need to diagnose a case, but it certainly gives you more. It's not a time-consuming procedure to mount cases, once you have the hang of it. And you don't have to trim study casts."

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- "Those who mount cases believe that articulators know how to chew."
- "If you transfer a mounted case and the receiving orthodontist doesn't use the same articulator, it's meaningless."

What articulator do you use?

The most popular articulators were the Denar Mark IV and the SAM. Others mentioned, in decreasing frequency, were the semi-adjustable Whip-Mix, Combi, Hanau, and Panadent.

2. How many suppliers do you purchase orthodontic products from on a regular basis?

There was a relatively even distribution in the number of suppliers used, with a median of six sources. Only one clinician reported using one supplier and, on the high side, one reported using more than 10.

How often does your office purchase orthodontic products over the Internet?

No respondent used the Internet routinely, and only one used it occasionally. Another mentioned that the capability to order by computer was to be added shortly. Two interesting comments:

- "I buy most of my office supplies over the net and would gladly use it to purchase orthodontic supplies. But there is no single source that is user-friendly and easily accessible."
- "If I knew where and how to access the Internet for orthodontic supplies I would do it in a heartbeat. But I want the Internet supplier to have a broad band of supplies at very competitive prices and dependable, timely delivery. Something like amazon.com's operation when I order a book."

How many suppliers' representatives visit your office annually, quarterly, or monthly?

Between two and five suppliers reportedly visited at least quarterly, with a median of three. The numbers fell to a median of one visitor on a monthly basis.

How useful do you find these visits?

Only one respondent felt suppliers' visits could be very useful. The majority indicated that these visits were somewhat useful, but 25% of the group thought they were not useful at all. Some individual responses were:

- "Representatives help keep me abreast of some of the new instruments, materials, and supplies in the profession."
- "The availability of the representative over the phone is more valuable than the personal visits. However, I do like to be updated with new products and concepts."
- "They usually come to the office unannounced, and we are too busy to see them."
- "The object of their visits is to push new products or steal an account from my present suppliers."

Please rate the following features of an orthodontic supplier in order of importance to you: personality, skill, and knowledge of the sales representative; reliability of service; price; innovativeness of products and materials; responsiveness to special requests.

Reliability was the most important feature to the respondents. Innovativeness was next, closely followed by sales representatives and price (with all three given approximately equal weight). Responsiveness to special requests was rated the least important of the factors listed.

How could orthodontic suppliers better meet vour needs?

The clinicians suggested that suppliers' representatives should have more scientific information on new products and more detailed instructions on the use of new materials that could be easily absorbed by chairside assistants. Respondents expressed a need for more supplier-sponsored continuing education in how products could be utilized in various techniques. Practitioners would also appreciate "more science background and less hype and glad-handing."

A few clinicians expressed strong displeasure with the various discount systems offered by suppliers, finding them confusing and not uniformly applied. Others asked for quicker service, less back-order down time, and samples to try before placing substantial orders. Still, a sizable number of respondents (11%) believed the suppliers were doing a good job of servicing clinical orthodontists.

Specific suggestions included:

- "There should be more competitive pricing."
- "Suppliers should avoid marketing products directly to the public."
- "Create fax forms for quick and accurate ordering."
- "Have a one-stop Internet shop that will guarantee the best products for the best price. If it could be done on the Internet like pricescan.com, I would be the first enthusiastic customer."
- "Cut a lot of the gimmicks and concentrate on service and quality. Edgewise is edgewise is edgewise."

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