

## Editorial

Dear Friends and Colleagues

I hope all of you have enjoyed your holidays and I wish the best for all of you this new year. I have been asked several times to advise about how to improve patient's compliance as this is a big issue when the plan of treatment for malocclusions and myofunctional problems involves functional appliances. Patient's non-compliance prevents a lot of dentists to include functional appliances in their plans of treatment. Many colleagues tend to treat only with fixed appliances arguing it does not depend on patient's compliance. However, in many cases elastics and other devices are required for reaching the goal of treatment, and so, fixed orthodontics also depends on patient's compliance.

I wrote a bit on this regard in the MRC e-News published in our website. However, I elaborated more on this regard here, including some approaches that I frequently use with my patients when I want to explain to them and their parents what my intention is with the appliances that I want to use for treatment, and even more important, to motivate my patients to wear the functional appliances as I indicate. I hope you find these ideas I express in this issue helpful to improve your patients' compliance and they facilitate the way you motivate your patients for wearing the TRAINERS. If I have to describe in just one word how to improve patient compliance, I would say that "MOTIVATION" is the key.

I do not want to finish this editorial without mentioning some of the great people who I met during 2005. In my last issue, I mentioned the wonderful time I shared with the great team in Mexico. During the second semester of 2005, I was invited to Brazil where I have the opportunity of lecturing about the TRAINER System™ in the congress commemorating the 50 years of the Brazilian Society of Orthodontics. This was a great work from Flavio Lopes and his wonderful team from Orthosource, who put me in this congress and gave me the opportunity to share with lecturers like Prof. Ravindra Nanda and Prof. Sten Linder-Aronson. I thank Flavio, his team and Orthosource for all the wonderful time they gave me there and for the opportunity they got us, MRC and me, to explain in a very high qualified forum the scientific basis and *modus operandi* of the TRAINERS. Working as a team we will get our message through the dental community: "To treat malocclusions we need first to understand its aetiology, Soft Tissue Dysfunction".

I hope you may find this issue interesting and helpful for your business. My best wishes

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## Patients' Compliance

### How to motivate your patients to wear the TRAINERS

During the course of orthodontic treatment, patients frequently complain and are anxious about their appearance. The most frequent complaints are impaired speech, impaired swallowing, discomfort due to pain or functional restrictions and lack of confidence in public. Thus, it is important those dentists intending to initiate an orthodontic treatment, particularly with functional appliances, keep in mind that patients' complaints are real and a big issue, so, they must know how to deal with this situation if they want to succeed in their treatments.

Adaptation to discomfort and pain generally occurs between 2 and 7 days after placement of the appliance (Sergl 1998 and 2000). Patients' acceptance of an orthodontic appliance may influence and contribute to a successful outcome of treatment. Discomfort normally disappears between the period mentioned above, but only when the patient is wearing the appliance 24 hours a day. The TRAINER is generally indicated to be worn 1-2 hours during the day and overnight. In this context, discomfort caused by the TRAINERS, could take a bit longer to disappear. Even more, those patients who do not follow the indications will need more time to adapt to the TRAINER, and thus, the risk for quitting treatment is much higher.

Therefore, motivation is an important key when an orthodontic treatment is planned and established, and becomes even more important when the plan of treatment includes functional appliances such as TRAINERS.

Patients who have higher personal perception of the severity of their malocclusion and functional problems adapt faster and have less pain (Sergl, 1998). For this reason, compliance with functional appliance is higher in those patients with temporomandibular disorders who look for treatment because they are in pain, than in young patients whose parents bring them in to the dental office looking for treatment because it's the parents' concern, whereas there is no concern from the patient. Patients' non-compliance is also high in those patients who look for treatment only for aesthetic reasons, but who are not concerned of functional problems causing the malocclusion, or even worse, those who have not felt any pain at all over the normal functioning day.

Dentists intending to treat with functional appliances may be aware that it is more difficult to prompt patients to wear a TRAINER than it is to get them to take a medication for a painful dental infection. This is because the patient with a dental infection is in pain, and treatment releases the patient from his suffering. On the other hand, the orthodontic patient is generally not in pain, and treatment causes pain (even functional appliances cause discomfort and soreness). In many cases, discomfort caused by the appliance is the main reason for patients to quit treatment. Therefore, when any orthodontic plan of treatment is presented to a patient, even those with functional appliances, dentists must acknowledge to their patients that there must be some immediate discomfort or inconvenience

associated with the treatment, but these minor annoyances are justified by the various long-term gains of improved function and aesthetics. It is a big mistake to say the functional appliance is not going to cause any sore or any discomfort. When the patient starts feeling discomfort, he/she loses trust in his/her dentist.

The most frequent non-compliance patients are kids and teenagers. In general, kids do not wear a functional appliance because they do not understand what it is useful for and what their parents and dentist are looking for. Teenagers are worried about their appearance and their mates' acceptance. Patients and parents must have a solid understanding of what exactly is expected from them over the course of treatment, and so, the words used to explain the plan of treatment by the dentist must be clear and understandable for patient and parents. In the following paragraphs I give an example of how I frequently prompt kids, teenagers, and in particular those patients who show a poor or defiant attitude toward orthodontic treatment, to make clear in their minds long-term benefits he/she will get collaborating with treatment I am proposing and following my instructions for using the TRAINER.

Generally I use the following analogy: "Let's think you are in your classroom. You have 24 classmates, which perfectly fits the size of the classroom. However, this year the school has decided to bring 8 new students. When the new students are brought into the classroom, the teachers realise there is no room for them. What a problem! They have to solve it out." And then, I asked my patient: "How do you think they

could solve the problem out?" The patient normally says: "Easy, just pull them out and send them to another school." At that moment, I switch to real life and say: "You see, that is now happening in your mouth. You have 24 teeth and there are 8 more teeth coming (or 4 if only wisdom teeth are missing), and there is no room for them, or even for teeth already in your mouth. So, if I would think as you proposed for your classmates, I should pull out 8 teeth from your mouth? Do you agree with that?" Obviously, the patient immediately jumps over and says "NO". So, I continue: "Let's think about a much better solution. Going back to the classroom example, do you not think the teachers may decide to make a bigger classroom, and then, they may be able to put the 8 new students in without too much struggling? So, we could say the same for your mouth. If we stimulate growth in your mouth, you will have enough room for the new teeth, and the most important, I WILL NOT HAVE TO PULL YOUR TEETH OUT. Do you understand me?"

The patient now understands better what is going on, why his/her parents are concerned and what I want to do. At that moment, I show him/her the TRAINER and explain my patient how this appliance is going to make more room for the new teeth, or for those teeth which are misaligned. Also, I explain him/her that wearing the TRAINER as I recommend there will be some inconvenience to talk, some discomfort and some sore or even pain on the teeth, particularly when he/she wakes up in the morning and goes for breakfast.

Nevertheless, the great news is that through his/her compliance, the discomfort will disappear in a couple of weeks, and at the end of the treatment he/she will not have crowded teeth, and the most important thing, I WILL NOT HAVE TO PULL TEETH OUT FROM HIS/HER MOUTH! This is the first approach with kids and teenagers to initially motivate them wearing the functional appliance. The general idea is to show them what we want to do with an understandable example using simple words.

But this is an initial step for motivation. At this stage, it must be clear that both patient and parents are participating in this treatment and that the family, not just the patient, are responsible for the success of the treatment. Once this is achieved, dentists must arrange the environment in order to facilitate the occurrence of immediate reinforcement for patients' compliance over the course of treatment.

When the patient has accepted and showed interest in collaborating with the treatment, mainly because he/she wants to avoid extractions, I ask the patient to write down those events he/she may consider rewarding or enjoyable. Thus, we prepare a list of possible rewards for his/her compliance wearing the TRAINER. Then, we review the indications for the treatment and what the parents are expected to do for their kid's behaviour regarding treatment. Thus, the parents are prompted to reward the patient at the end of each week accordingly with patient compliance.

I suggest to the parents starting with the simplest, cheapest reward in the list, also, I review with both patient and parent the patient's compliance list. For example, it is expected that the patient wear the appliance 1-2 hours when he/she comes home from school, before having lunch or dinner or when he/she is doing his/her homework; He/she must brush his/her teeth after dinner and wear the Trainer™ immediately after until next morning; Parents do not have to remind their son/daughter of wearing the appliance, if so, it will be considered non-compliance; Patient requires getting a good mark of compliance on the daily parental observations at least for five days in order to earn a reward at the end of the week. Several items may be included in the "patient's compliance list", but they must be totally clear and accepted by both the patient and his/her parents.

Every time the patient comes to my office I ask how he/she is going with rewarding (Note I do not ask for compliance) and how many rewards he/she has got since the last visit. Every visit I also remind my patients that they must exhibit the appropriate treatment behaviour and the parents to observe closely to give the appropriate reward.

These are some examples of how I motivate my patients for wearing the TRAINER. I invite my colleagues to share with us other techniques that may be used to motivate your patients, and I will be keen to include your suggestions in the following issues.