An interview with

Leonardo Rigoldi Bonjardim

- Graduated in Dentistry from the University Center of Educational Foundation of Barretos (UNIFEB, 1997).
- Specialist in TMD and Orofacial Pain, Brazilian Federal Council of Dentistry.
- Master of Dentistry, area of concentration in Oral Physiology (School of Dentistry /UNICAMP, 2000-2001).
- Doctor of Dentistry, area of concentration in Oral Physiology (School of Dentistry /UNICAMP, 2002-2004).
- Post-doctorate in Applied Dental Sciences (School of Dentistry/USP, 2011).
- Associate Professor of the School of Dentistry of Bauru-SP (School of Dentistry/USP).
- Professor and Course Tutor of Master's and Doctoral Students in the Postgraduate Program of Applied Dental Sciences (School of Dentistry/USP, 2011).
- Scholarship Holder - Productivity in Research - CNPq (PQ 2).
- Member of the Board (Secretary) of the Brazilian Society of Temporomandibular Dysfunction and Orofacial Pain (SBDOF).

Interviewer
Murilo Priori Alcalde[1,2]

[1] Universidade do Sagrado Coração, area of Endodontics (Bauru/SP, Brazil).
[2] Universidade de São Paulo, Faculdade de Odontologia de Bauru, area of Endodontics (Bauru/SP, Brazil).

How to cite: Bonjardim LR, Alcalde MP. An interview with Leonardo Rigoldi Bonjardim. Dental Press Endod. 2020 Sept-Dec;10(3):10-3.
DOI: https://doi.org/10.14436/2358-2545.10.3.010-013.ent

What led you to doing your Master's Degree in Oral Physiology, and more specifically, specializing in the area of TMD and Orofacial Pain?

In December 1997, after concluding my graduation in Dentistry, still a little "lost" and insecure with regard to my professional future, one of my mother's sisters (Aunt Silvinha) and her husband (Uncle Douglas), residents in Piracicaba, sparked in me the idea of transferring residence to their home, as there were greater possibilities of continuing and furthering studies, considering the presence of the Piracicaba School of Dentistry/ UNICAMP. Without thinking twice, I accepted their invitation. Initially, I began by doing a refresher course in Clinical Dentistry at the São Paulo Association of Dental Surgeons. In May 1998, two months after going to Piracicaba, I was hired by the Americana Municipal Health Foundation (FUSAME) to work 20 hours a week as Dental Surgeon at the Mathiensem Health Clinic. I was also introduced to a dentist in Piracicaba, (Dr. Fernando Sachs), who favored me with his great friendship, and generously granted me the use of a room to work in at his consulting rooms. As time passed, the need increased for greater investment in scientific knowledge. During this period, I was introduced to a Professor at the Piracicaba Dental School (FOP-Unicamp), Professor Dr. Maria Cecília Ferraz de Arruda Veiga, who encouraged me to participate in the process of selection of a master's degree in Dentistry, area of Oral Physiology, heightening my interest in research in the area of TMD and Orofacial Pain. Here it is worth pointing out that in the area of Orofacial pain at FOP/UNICAMP there was also Professor Dr. Cláudia Herrera Tambeli, one of the leading names in the area of physiology of orofacial pain.

In addition to this, I was extremely interested in the Postgraduate Program in Dentistry at the Piracicaba Dental School (UNICAMP), area of Oral Physiology, because it was the first course in this area in Brazil and it enabled me to study and learn a little more with respect to the mechanisms involved in processing pain, particularly in the orofacial region, and those involved in the etiopathogenic aspects of temporomandibular dysfunction. I participated in the selection process, was approved in 2000, and opted to leave my two jobs to enable me to dedicate myself exclusively to research. Under the tutorship of Professor Dr. Maria Cecília, we developed the study entitled "Effects of Tramadol and Dipyrone on the nociceptive behavioral responses induced by the administration of mustard oil in the TMJ of rats", with a scholarship from CAPES. On December 13 2001, this research culminated in the defense of my master's thesis, approved by the Board of Examiners? Although satisfied with the results obtained by using a behavioral model for the study of pain in rats, I thought it was important to apply the knowledge, obtained in the pre-clinical studies, in the dental clinic. Therefore, seeking to maintain the line of study of TMD and orofacial pain, I contacted Professor Dr. Maria Beatriz Duarte Gavião, professor of the Pediatric Dentistry Department, who belonged to a group of professors, whose work also involved this same line of research.

Afterwards I participated in the selection process for Doctoral studies in Dentistry, area of Oral Physiology, so that in addition to the knowledge obtained in the Master's course, I would increasingly gain knowledge of the mechanisms involved in temporomandibular dysfunction and orofacial pain. When I requested the tutorship of Professor Dr. Maria Beatriz Duarte Gavião, she readily accepted, and under her guidance, we developed the study entitled "Factors associated with the presence of signs and symptoms of temporomandibular dysfunction in adolescents", with a scholarship from CAPES. In September 2004, this research culminated in the defense of my doctoral thesis, also approved by the Board of Examiners.

Therefore, on conclusion of my graduation, right from the beginning of my professional activity in both my academic and clinical life, I could not see myself working in any area other than that of TMD and Orofacial Pain.

What is your general view of qualifying dental surgeons for diagnosis and treatment of TMD and Orofacial pain?

Generally speaking, formation of dental surgeons in the area of TMD and Orofacial pain is deficient, and is frequently not based on the highest levels of evidence, in terms of approach to the patient. There are various points that could explain this difficulty:

a) The specialty of TMD and Orofacial Pain is a relatively recent creation, and was recognized by the Federal Council of Dentistry (CFO) only at the beginning of this century, so that it has a "lifetime" of approximately 18 years.

b) There is still a lack of TMD and Orofacial Pain disciplines in the majority of undergraduate courses, and when existent, their content is still provided in a fragmented manner within other disciplines. Moreover, in many cases, content is apparently still being taught, which discusses concepts no longer supported by the highest levels of scientific evidence in the approach to patients with orofacial pain.

c) By the very "proceduralist" nature of the formation of dental surgeons (DS), they often desire to try and solve the cases of orofacial pain by using procedures that they are most capable of performing, and were learned more systematically. These treatments are usually invasive and irreversible, and in general, they have long been known to be of no benefit to patients.

d) From my perception it would also appear that the majority of dental surgeons of other specialties feel themselves apt to attend patients with orofacial pain, by using their knowledge about their own specialties. As I always say in classes, I still see many dentists treating patients according to the procedures and concepts of their specialties, and not in the manner really required by the patients, based on more up-to-date evidence of diagnosis and treatment of TMD and Orofacial Pain.

e) In general, few [dentists/ professionals] are familiar with the criteria of classification, diagnosis and treatment of TMD and OroFacial Pain. As I always say, we are [part of] a specialty that had only just come of age; therefore, we have a long road ahead of us. Moreover, I always remember that we are few specialists scattered throughout Brazil, when compared with other specialties. Lastly, I think that a great advancement was the creation of the Brazilian Society of Temporomandibular Dysfunction and Orofacial Pain (SBDOF), which by means of scientific events and other tools (social media, etc), have led to [the dissemination of] correct information based on evidence in the area of orofacial pain.

What is the greatest challenge in the treatment of TMD and Orofacial Pain?

In my opinion, the greatest challenge in a treatment is to establish a correct diagnosis of the problem, and especially in cases of chronic orofacial pain, in addition to diagnosis, investigate the possible associated factors that may hamper the good development of the case. As I always say, although we have various procedures and treatments to be used according to each diagnosis, the treatment of Orofacial Pain must respect the characteristics of each patient, and therefore, there is no cake recipe that will be effective for all patients in the same way. We must all start with the premise that for a treatment to be effective, we must know about all the types of orofacial pain, know the epidemiology and etiology of the disease, know how to examine, classify and diagnose, verify the presence of painful and non painful comorbidities, thereby avoid calling those "patients refractory", in whom, in some way, the approach was deficient or even incorrect.

The changes that occur in the orofacial region may arise from different origins. How can Dentists differentiate between painful processes in the orofacial region resulting from Endodontic treatment or a process of TMD, etc.?

In general, the majority of dentists have knowledge of and are familiar with pain originating from dental and supporting tissues; Therefore, clinical exams, diagnostic tests and imaging exams are normally sufficient to confirm [the origin of] odontogenic pain. However, a pain localized in the region of a tooth may frequently have no relationship whatever with the tooth. Therefore, after eliminating the possible sources of pain of dental origin, by means of exams commonly used in the dental office, we must consider other orofacial pains, and among these, TMD. In this case, during the clinical exam for diagnosis of TMD, on palpation of the masticatory muscles, for example, the dentist must ask whether there is pain, whether the pain is referred to the region of the complaint of toothache, and lastly, whether the pain is FAMILIAR (similar to the pain you are complaining about). Therefore, the entire embarrassment in this case is to differentiate between toothache and pain in the tooth.

At present, the use of Botulin Toxin has been proposed for the treatment of tooth clenching and TMD. Is there any scientific evidence that this treatment is really effective?

What I always suggest is that before beginning a treatment in patients with chronic orofacial pains, dentists should ask themselves if they really know what

they are treating; that is to say, once again I emphasize that we must start with the premise that we must know what the problem is before we treat it. In this direction, I have seen an enormous number of dentists, without any formation in the area of orofacial pain, making use of botulin toxin for treating it. The systematic reviews and majority of well conducted studies do not support - at least in the large majority of cases - the use of this therapy for TMD and bruxism. It is worth pointing out that the approach to the patient with chronic orofacial pain goes far beyond merely performing a procedure in the patient. We must not and cannot ignore the fact that pain is an unpleasant, subjective, individual experience, influenced by biological, psychosocial, cultural, and motivational factors, among others. Once again, I emphasize that we must treat patients according to their real needs, and not based on the only procedure that you know.

What is the relationships between patients with chronic pain in the orofacial region and quality of life?

Chronic orofacial pain, with emphasis on TMDs, are highly prevalent in the population in general. Since these pains limit masticatory function, cause pain, joint noises, among other problems, they are known to have a negative impact on the quality of life of persons affected by them. Therefore, various studies have demonstrated relations between TMDs and psychological factor, low quality of sleep, absenteeism, change in daily life activities, diminished social life, etc.

Does laser therapy have any efficacy in the treatment of TMD and Orofacial Pain?

The use of low-level laser has been shown to be capable of helping with the symptomatic treatment of orofacial pains, including TMDs. Recent systematic reviews have shown a moderate effect of therapy with laser in reducing pain in patients with TMD. We must, however, point out that laser is not a panacea; that is, the cure for all orofacial pains. Once again, I emphasize that the approach to patients with orofacial pain is broad in scope and complex, and dentists must not lay all their bets on a single therapy.

What are your suggestions for those who are starting their careers?

There is no cake recipe [answer to] this question. Every human being is unique; all of them have their values, beliefs and objectives. However, if it were possible to align values with the objective, the pathway could be easier. Imagine that someone is going to read a sincere homage to you, in a large auditorium, filled with friends, relatives and colleagues, by virtue of all that you have done over the course of your career. What would you like the person to read? With this answer, you would probably identify your values. Based on these, you could define objectives that would bring you well-being during the climb up your ladder. From this point, define the objectives, motivate yourself to attain them (weigh the extent to which it is important to you), plan how you will attain each rung of the ladder (how and when to acquire the competences necessary) and go into action immediately, always monitoring and celebrating the results, in a continuous process.