



Dr. Clayton A. Chan, founder and director of Occlusion Connections Inc. (OC).

Changing Smiles with One Correct Bite at a Time

by Dr. Audrey Abella

dysfunction, joint derangement and pain.

Three disciplines

OC specialises on three disciplines – TMD, restorative/prosthetic and orthopaedic dentistry. What

are your reasons in choosing these specialities?

Dr. Chan: Most dentists are not trained in these disciplines yet many of the clinical problems they face are directly related to these. The subject of dental occlusion is lacking in every dental school education. OC recognises there are various levels of competency that must be achieved to address more challenging clinical cases. OC's training programme acknowledges the importance of these issues to better prepare dentists for real world dentistry. Our goal is for dentists to see the bigger picture in the diagnosis and treatment planning of challenging cases in order to provide great dentistry.

The OC audience

Being US-based, how do you facilitate interaction with your audience?

Dr. Chan: OC has a growing following from the world over including Singapore, Indonesia, Japan, Germany, Russia, Spain, Canada and many parts of the US. Others learned about OC through the internet; others by word-of-mouth. We have established internet study club

forums specifically for dentists who have attended our courses. Internet forum groups (through Facebook) also help to convey our teachings and thoughts around the world. Many of our trained OC colleagues help to mentor, support and guide these forum discussions.

The response from the Asia-Pacific dentists has been particularly great. Early on in 2008, progressive leading dentists such as Dr. Jerry E.Y. Lim and Dr. Ronnie Yap came to OC to advance these training. They were very instrumental in pioneering these teachings to other colleagues in South East Asia. Dr. Yue Weng Cheu came for training and has also been a great proponent of GNM teachings. All of these doctors and many others have taken the lead to share their experiences, knowledge and understanding to help encourage others to learn these occlusal teachings. A growing number of Singapore doctors along with other leading dentists from Indonesia have also come. They have shown tremendous commitment and dedication to help their patients as well.

Building a didactic backbone

How essential is continuing dental education for both dental professionals and auxiliaries?

Dr. Chan: Auxiliaries – including the front office personnel and hygienist – are instrumental in diagnosis. Including every team member to understand the bigger picture is instrumental to a dental practice's success. When they are aware of the different clinical situations

A general dentist who has devoted his time to researching the science behind occlusion, Dr. Clayton Chan is the founder and director of Occlusion Connections Inc. (OC), which is based in the US. Launched in November 2008, OC is a gnathologic and neuromuscular-based teaching centre that focuses on the subject of dental occlusion. Their philosophy is based on clinically relevant principles and techniques that are founded on physiologic science.

Apart from his gnathologic training, Dr. Chan has also trained in the use of electronic computerised instrumentation, and he is also a trained lab technician. Through his teachings in occlusion, dentists in North America realised that there was more to occlusion than what they were taught. It took several years for dentists to finally see the value in these teachings and how these could positively impact the dental practice, realising that occlusion is the key and foundation to all advanced dental procedures, especially if the case presented with masticatory

and how to address them, they become better co-diagnosticians. It is essential to have all team members on board and to advance their understanding.

Patient response

Compared to other dental specialities, TMD may be one of the least familiar to patients. Based on your experience, kindly share the most common patient reactions as it relates to TMD.

Dr. Chan: Many patients have undetected jaw dysfunctions; many have muscle tenderness problems and are not aware that these might be associated with long-standing temporomandibular dysfunction (TMD) that our profession has failed to effectively address.

Patients have reported that various methods of splint therapies, previous failed orthodontics, failed restorative and prosthetics and even occlusal equilibration procedures have contributed to their TMD problems, causing much frustration. Many have openly reported seeing numerous dentists and having tried many known methods without success.

Treatment costs

Specialised treatment protocols can translate to higher costs. Do you think cost is still a huge decision-making factor for patients?

Dr. Chan: Cost is always a factor for any dental patient. Our approach to

treatment protocols has been based on our patient's desires and needs. Our patients come to us knowing that they have big problems, since they have seen many health care professionals including numerous dentists and specialists. Because of this, they already know that effective treatment is going to cost something. Because of their experiences, they value what we do. The cost may be higher than most, but they see that it's worth the effort because the GNM approach worked for them.

This approach is not focused nor aimed at doing the most extensive rehabilitations. It is not about changing a patient's vertical dimension to do more costly dentistry; rather, it is about proper six-dimensional diagnosis. This approach benefits every dentist who realises that teeth, muscles and the TMJ seek homeostasis in the six-dimension space whether during function or when at rest. GNM is not about doing more dentistry: it is about being preventative and conservative.

Old versus new

Despite the significant advancements in dentistry today, some still follow traditional methods. What are your views on this?

Dr. Chan: Traditional dentistry has its place in the broader field of routine care for the majority of patients. The traditional approach serves the public

well. With the increase in oral hygiene, prevention and dental cosmetics, the public has greatly benefited in overall health.

In the GNM perspective, in spite of the advancements and technology available today, old habits and traditional ways fail to make the association of tender straining muscles to the intraoral problems seen on regular visits. What many assume is the problem from a habitual occlusal perspective actually has cost the public more, because the present paradigms fail to educate our profession toward the underlying cause of the problem. Treating symptoms seems to be the norm rather than actually diagnosing the cause of the problem.

GNM is keen to understand the underlying causes and is able to help educate our patients how to prevent these problems from occurring – being proactive rather than reactive. Dental health is about caring for the periodontium and the masticatory system, as well as the TMJ system in a healthy, non-invasive manner.

On digitalisation

It has been said that digitalisation is the "way of the future" in dentistry. Is your practice already adhering to the digital concept? How do you think modern equipment helps in terms of efficiency and workflow?

Dr. Chan: Technology is changing and





getting better. Proper training in the use of these technologies is key. The demand for technology and the financial preparation must precede the purchase of any digital technology. Any purchase has to fulfil the dentist's business goals and ethical obligations.

In our practice, it has not been a substitute for quality dental lab technicians who understand the particular needs of the clinician. The technician's understanding of the pros and cons of these technologies has actually streamlined our workflow. Technology can cost time and energy if used incorrectly. Our office has benefited from the use and application of digital dentistry mainly in the laboratory. This has helped in the efficiency and time management in the operatory.

Dentists must realise that if any problems arise, it is because of ourselves: skill set, treatment planning ability, case selection, and our ability to use these technologies properly and confidently. We must always recognise that it is the dentist who is in charge of the end result, and it is the clinician who is in charge of appropriately putting in the correct data to achieve an optimal result when using

digital technology. As the saying goes, what you put in is what you will get out. Digital dentistry is not a substitute to let one's guard down when it comes to quality care.

Mission and vision

Dr. Chan: Our mission and goal is to support dentists and dental lab technicians with advanced education and provide up-to-date training in the arena of advanced gnathology, neuromuscular and the use of diagnostics instrumentation. We believe implementing effective treatment protocols and techniques relating to the disciplines we focus on are highly valued. We believe we are leaders and a unifying factor to bridge our profession's understanding and appreciation of both the gnathic and neuromuscular occlusal principles. Our teachings promote and encourage a positive exchange of innovative ideas and learning among our colleagues who enjoy open discovery and guidance among our course attendees. We want to see these teachings, principles and concepts recognised, implemented and enjoyed by other progressive dentists all over the world.

1. We train dentists around the world in GNM.
2. We are driven by compassion and passion about what we do.
3. We bring care to those who are



hurting and to those who see value in what we do.

4. We establish physiologic rest and peace where we go.
5. We raise leaders who will mentor others in these core values to leave this legacy.

It is imperative for every aspiring dentist to look outside the traditional box of dentistry. If dentists acknowledge the difference between old and new, it will change their perspective on how they do dentistry. I have recognised that occlusion is the foundation to advanced dentistry. In order to master TMD, restorative/prosthetics and orthodontic/orthopaedics, one needs to understand what occlusion is really about. Without the proper understanding, one will never fully comprehend how to clinically address the more complex problems effectively. If we do not understand the physiology and biology of the masticatory system, we will never learn how to conservatively diagnose and treat clinical issues that arise without defaulting back to the traditional methods we were taught in dental school – treating the symptoms rather than the cause.

Educating myself in these areas has allowed me to help inspire others to see that there is so much more than what traditional perspectives have taught us. It is the principles that matter, not just the technology: one can have technology and miss the principles. We need to encourage each other to learn the gnathic and neuromuscular principles. Returning back to the basics – the foundational principles by which all technology is designed – will help amplify our awareness in appreciating how the teeth, muscles and joint systems operate.

Driven by his goals, Dr. Chan will continue to create better smiles with one correct bite at a time, which not only improves patients from a dental perspective but enhances their quality of life. **DA**