



Chris Chang, DDS., PhD.

Dr. Chris Chang received his PhD in bone physiology and Certificate in Orthodontics from Indiana University in 1996 and is a Diplomate of American Board of Orthodontics (ABO). He is the author of *Jobsology*, co-author of *Orthodontics Vol I-III*, *Clinical Implant Dentistry I-II*, *Angle Case Report*, and publisher of *International Journal of Orthodontics and Implantology (iJOI)*. Dr. Chang frequently lectures worldwide on a wide range of topics, including impaction treatment, gummy smile, miniscrews, implant-orthodontic combined treatment and Jobs' effective presentations. As a private instructor since 2006, he has taught over 2,000 doctors from more than 21 countries. In addition to teaching and publishing, he also founded Newton's A, Inc. and Beethoven Orthodontic and Implant Group, based in Hsinchu, Taiwan. His passion in digital learning has led him to produce a series of video courses on orthodontics and implantology and an App (iOS), Beethoven Dental Encyclopedia. He has been actively involved in the design of orthodontic bone screws and application on impaction treatment. His latest focus is implant and orthodontic combined treatment. In this interview, we had the pleasure to have the contribution of renowned professor Dr. Patricia Vergara Villareal, from the University of Cartagena in Colombia, pioneer in Latin America on the use of mini-implants following Dr. Chris Chang's philosophy; Dr. Rosangela Damis from Uberlandia, the major Brazilian expert over the self-ligating Damon System and Dr. Rodrigo Milani from Sao Paulo, renowned private lecturer on the self-ligating systems as well. Chris Chang is genuinely a great name in Orthodontics. He is a visionary leader of a very well trained and motivated staff and represents an example of success and dedication to Dentistry for development and professional improvement. As an accomplished communicator and lecturer, he welcomes all colleagues within taiwanese hospitality in his private practice in Hsinchu, always with a tireless energy.

Mauricio Accorsi



Dr. Mauricio Accorsi with Dr. Chris Chang in his clinic in Taiwan.

Dr. Mauricio Accorsi

1. Your approach for TADs placement out the inter-radicular area is so amazing and are changing the way we design orthodontic mechanics, offering much more therapeutic possibilities in different clinical situations. So, what is your criteria for moving the entire arch, in Class III, or II, instead of orthognathic surgery protocol? In addition, do you perform some volumetric airways analysis through CBCT in this decision-making process?

The key determinant is patient profile. If the profile is acceptable and the patient insists on non-surgical treatment, I will give it a try.

I have not include the airway analysis. Maybe I should.

2. Could you provide us some simplified chart for orientating the OBS¹ placement in the palate, infrazigomatic crest, mandibular buccal shelf and inter-radicular area, regarding the miniscrew length, thickness or other individual characteristic that you may find important for beginners?

The following photos will provide a clear illustration for these questions:

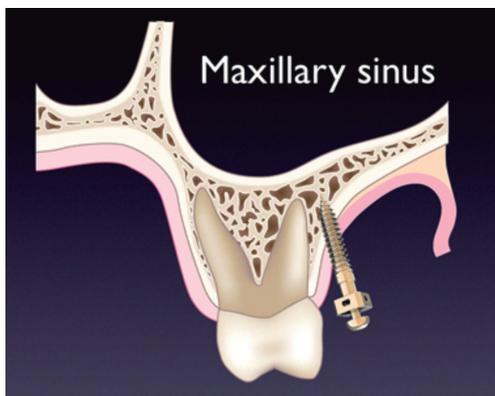


Figure 1 – IZC screw.

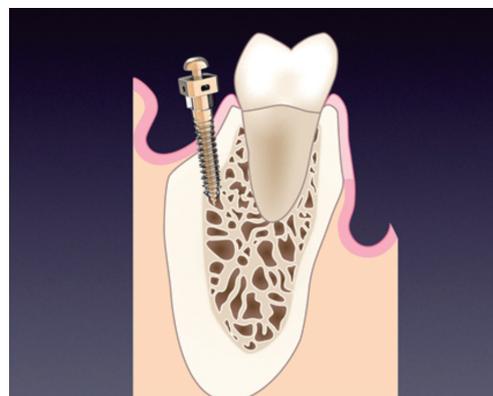


Figure 2 – BS screw.

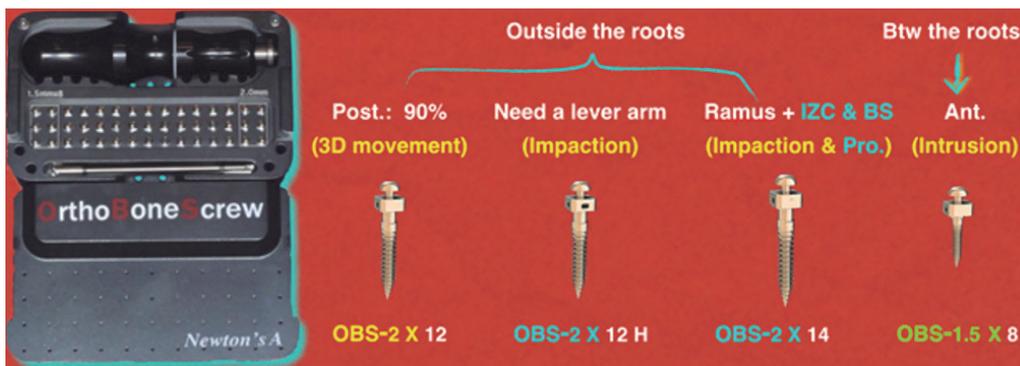


Figure 3 – Screw length for different indications.

3. You have a wonderful teaching program in Taiwan related to self-ligating mechanics, VISTA protocol and TAD's placement. So, could you tell us more about the International Damon, OBS and VISTA Workshop? In addition, can you explain to us the purpose of iAOI - International Association for Orthodontics and Implantology?

This course is designed to empower doctors to be able to solve many common tough cases without sending patients to specialists back and forth. Most patients with complex conditions in my country CAN NOT afford expensive interdisciplinary treatment. Although I agree in principle that interdisciplinary treatment may produce ideal results, sometimes, it is just not a practical option for all.

¹ <http://www.orthobonescrew.com/>

The purpose of founding iAOI is grounded in the same idea as I mentioned earlier. We hope to take a step further to provide doctors with advanced training in cross-discipline treatment and certifications as well.

Dr. Patrícia Vergara Villareal

1. Data from Dr. Eric Liou and Dr. Chen's studies indicate that the placement of OBS in the infrazygomatic crest are in two different sites, first in the MV root of the first molar and second, at the MV root of the second molar. What clinical criteria, or guidance could you provide us with to make the placement of the OBS without any risk of damaging the adjacent structures?

In my view these are indeed valuable guidelines. However, I'd also encourage doctors to clinically perform palpation to find the thickest bone volume, usually located between first and second molars. Meanwhile, bone quality should also be considered. The most dense and thickest bone is almost always found around the first molar due to functional loading, as the Wolff's law indicates.

2. I admire the way you place the OBS in the mandibular buccal shelf transmucosally without any pilot drilling. Given the biotype of the mucosa, what is your secret for not getting the mucosa's tissue screwed into the coils of the miniscrew?

The technique is two-part:

- 1- Always start by making an indentation with a dental explorer first.
- 2- STRETCH the mucosa tight when screwing.

3. When applying the Discrepancy Index for impacted teeth, what's the mandatory criterion for bringing out the impacted teeth or opting for extraction?

For young patients, my priority is to save every canine, because I am a firm believer in canine guidance. With CBCT diagnosis and the right biomechanics design, I have accumulated many successful cases. I think the key is good training. That is why we invest a lot of time and effort in our training center. A minimally invasive approach with the aim of saving important teeth (canine) is our golden rule.

Dr. Rosangela Damis

1. Assuming that the use of miniscrews improves orthodontic mechanics, with regards to passive self-ligating systems, do you believe it's necessary to adapt the torque individualization protocol with Damon System?

Indeed, I believe that we should take torque into consideration when designing mechanics. The force system always has an effect on torque value. We need to have the ability to anticipate those effects and side effects.

2. For intruding and uprighting lower molars, where are your preferred sites for OBS placement in the mandible?

Which is your criteria when bone defect is present, considering this is a common situation in that area?

Again, we need to consider both mechanic design, and bone volume and quality before determining the screw placement site. Please watch my YOUTUBE video, titled Post. Buccal X-bite² for a more detailed illustration.

3. What is your approach when using OBS and Damon System for patients presented with increased Lower Anterior Facial Height (LAFH) and asymmetric gummy smile?

Extrude posterior segment with up and down elastics. Use anterior inter-radicular screws to intrude incisors, followed by surgical crown lengthening for gummy smile correction.

For asymmetric gummy smile correction, screws are the best choice. Keep one side longer than the other will solve the problem. Please watch my YOUTUBE video, titled Gummy smile correction for a more detailed illustration

Dr. Rodrigo Milani

1. Why do you recommend the use of mini-screws made by stainless steel rather than titanium?

The way I place screw requires a change in direction during insertion in order to avoid hitting the roots. Stainless steel screws is more breakage-resistant, especially in the buccal shelf area.

2. Could we use titanium mini-screws in the infrazygomatic crest instead SS?

Yes, it requires a deeper bite of cortical bone before changing directions as the titanium tip is very brittle. Caution: DO NOT use Ti alloy screws in the buccal shelf. Mandibular bone is too dense. Use SS screws ONLY in the mandible.

² <http://goo.gl/iuq0ma>