

the **art** of dentistry



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SEEING BEAUTY IN NATURE EVERYWHERE

- Dr. Clarence Tam,
Auckland, New Zealand

Interviewed by Ms. Jamie Tan



Nowadays, aesthetics has become an important part of our lives. We might not be aware of it but we all look and value aesthetics and beauty in nature and, generally, in everything. However, in dentistry, it is crucial not only to achieve aesthetics but also to provide proper function of restorations/prostheses. Dental Asia takes a closer look at one of the dental practitioners who has perfected the harmonious balance between aesthetics and function in her practice, Dr. Clarence Tam of Auckland, New Zealand. An approachable individual, she is well known for her passion, attention to detail, and commitment to having an interactive approach with patients in all of her cases to maximise predictability.

Originally from Toronto, Canada, Dr. Tam completed her Doctor of

Dental Surgery and General Practice Residency at the University of Western Ontario and the University of Toronto, respectively. Her practice, Tam Dental Group, focuses on restorative and cosmetic dentistry. She is well-published in the local and international dental press, writing articles, reviewing and developing prototype products and techniques in clinical dentistry. Recently, she also joined the Dental Asia Advisory Board in recognition of her constant relevant contributions to the publication. Aside from all these, she still has time to frequently and continually lecture internationally.

Fascination with the art of dentistry

According to Dr. Tam, she wanted to be a microbiologist growing up. However, everything changed when she learned about periodontal pathogens, particularly *Actinobacillus actinomycetemcomitans* and *Poryphyomonas gingivalis*, in 13th grade.

“I was drawn to dentistry and how it is the perfect fusion of science, art and business,” said Dr. Tam. She recalled that this was her exact response to her dentistry entrance interview back in the day.

Though no one in her family was in the field of dentistry, she admits that her uncle, Stanley Chung a medical doctor, made a great impact in her life. “Watching him with his patients through the years gave me the desire to pursue a career in helping others.”

Dr. Tam added that she really fell in love with aesthetic or cosmetic dentistry as she has always seen the beauty in nature. “I see beauty everywhere. I appreciate the optical and anatomical nuances of nature - the convoluted and irregular branching of tree trunks in the park, the intaglio surface of leaves to the distribution

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and frequency of the branching veins. It is an honour trying to do justice by reconstructing teeth (nature) everyday.”

She also revealed that aside from aesthetic or cosmetic dentistry, she has an appreciation and inclination in oral surgery in particular paediatric oral and maxillofacial surgery relative to cleft lip and palate repair. “I think these are life-changing procedures that restore function and aesthetics. If I wasn’t a cosmetic dentist, I most certainly would be an oral maxillofacial or plastic surgeon.”

Empowering oneself and others

In 2013, Dr. Tam purchased an older group practice in Newmarket, Auckland. Since then, Tam Dental Group was established and has been growing with no signs of slowing down in the dental scene. “It is empowering to have the autonomy of being a business owner; I can make decisions on my own with regards to huge matters and even minute decisions such as which products or materials to purchase. I think having the freedom to be your own boss married with the passion within is a very synergistic element that fuels excellence.”

Dr. Tam also shared that achieving success does not happen overnight and it is full of hard work, dedication

and sacrifice. She truly believes that communication, being transparent, is an important key factor and she constantly educates patients to understand concepts and situations, and involves them in every stage of my treatment planning to delivery and beyond.

“Building the patient’s dental IQ empowers them to be more confident as patients allowing them to speak at a professional level and ask relevant questions they never would have known otherwise,” explained Dr. Tam.

Minimally invasive, maximally aesthetic

Cosmetic dentistry is a personal statement, a redefinition of salient and subtle personal attributes; expressed in a smile. According to Dr. Tam, everything is an indispensable detail in a smile: the framing of the teeth by the gingiva, the framing of the gingiva and teeth by the lips, the framing of the mouth by the face. She strongly considers minimally invasive dentistry as a valuable aspect of her practice and it clearly coincides to her philosophy: minimally invasive, maximally aesthetic. This concept reflects her desire to remove as little sound biological tooth structure as possible to achieve an excellent aesthetic outcome which maximises the prognosis whilst improving the patient’s confidence.

“This is reflected in the philosophy of the American Academy of Cosmetic Dentistry, ‘Responsible Aesthetics’. This concept is a practice builder as it shows patients you care about their teeth and health more than about gaining the ultimate aesthetic outcome at any cost. As dental practitioners, we should show empathy to our patients. Essentially, we are adhering to the ‘daughter test’ wherein we first ask ourselves in any clinical situation, whether we are comfortable completing any procedure on our own daughter,” she elaborated.

As Dr. Tam adapts this philosophy and concept into her practice, she gained popularity within her peers and patients, and eventually became known as the “Queen of composites” for her superb composite layering prowess that yield natural looking restorations.

“I truly consider the ultimate expression of aesthetic dentistry is through composite artistry, as we are responsible for the preparation, restoration and execution of the composition of teeth. I always try to do justice by reconstructing teeth and be minimally invasive while providing maximum aesthetics. It is humbling to be known but I am not stranger to mistakes and failures, I continue to strive and learn from them,” Dr. Tam honestly stated.

However, when asked to share one of her memorable cases, Dr. Tam talked about a 10-year-old healthy boy named Cohen. He was referred to Dr. Tam’s practice for aesthetic improvement of his upper anterior teeth, for which he was being teased. The boy had a history of three significant dental impact subluxation accidents as a child, which in all cases the eventually firmed up again according to the parent. The situation may represent hypomineralisation with or without the influence of a Turner’s syndrome tooth. Indeed, due to his frequent skateboarding, his scarred lip indicates that this type of injury continues to this day.



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“The cases that strike my heart the most are cases involving kids that suffer a loss of confidence due to teasing of their appearance. The cases that are most special to me are not those where I can do my planning, execution or my layering prowess, but rather those in which minimal tissue or tooth reduction is needed. Cases that truly embody non-invasive dentistry just like Cohen’s case wherein overnight vital bleaching using custom cervical trays and microabrasion before resin infiltration. Aside from the success of the minimally invasive procedure done, I think the best result was Cohen not being teased in school anymore,” explained Dr. Tam.



Fig. 1 Cohen's baseline smile



Fig. 2: Baseline shade prior to overnight vital bleaching w/ 10% carbamide peroxide.



Fig. 3: Opaldam was used in conjunction with Optragate.

Keeping up with the digital era

It has been said that digitalisation is the “way of the future”, Dr. Tam’s practice has been adhering to the digital concept utilising a digital workflow in their aesthetic treatment planning through Digital Smile Design (DSD) - the use of digital images and computer-based manipulation to demonstrate possible changes to the smile and specifically to the position, size, shape and colour of the teeth and gums. It’s a comprehensive cosmetic dental planning tool that uses digital calibration to known dimensions in the mouth in order to guide the placement of wax during the planning/blueprint or diagnostic wax-up stage.

“We never start planning any anterior case without taking the face into consideration. As I do many no-preparation cases, I found that scanning technologies are still not able to perfectly elucidate the contact area between two teeth. I am still reliant on analogue impression taking techniques, especially for complex cases. In my experience, at this moment, traditional clinical method in impression taking is more predictable relative to digital.



Fig. 4: The etch-rinse-dry-ethanol-dry cycles completed over four cycles and infiltration with TEGDMA-based resin done.



Fig. 5: Cohen one week post-op: Reduction of chromatic and white hypomineralisation.



However, printed 3D models of the diagnostic wax-up are utilised for transitional bonding in occlusal vertical dimension (OVD) modification cases.”

Dr. Tam clearly has no issues in sticking to traditional methods and she while also being open to adapting digital innovations in her practice. Aside from the DSD, Tam Dental Group also has the Ultradent Gemini Super Pulsed dual-wavelength laser, Morita Soaric dental units in nearly all their dental treatment rooms and looking forward for the arrival of their order of the new 3Shape TRIOS 4 intraoral scanner.

“Modern equipment allows for a less cluttered and more efficient way of treating patients, often with less pain and improved clinical outcomes. We are always striving to do things better and faster. Although, personally, I don’t mind if it takes me a bit longer in procedure to have an even better clinical outcome. According to Dr. Tagami, ‘Use bulk fills like a regular composite’ and take advantage

of improved monomer conversion, less shrinkage stress and better chameleon effect. This is utilising technological advances to improve clinical outcomes not necessarily speed," she remarked.

Promoting oral health and continuing dental education

Being active in the dental scene, Dr. Tam continues to promote oral health awareness and current dental innovations among her peers through her lectures and as an active Key Opinion Leader for an array of global dental companies including Triodent, COLTENE, Kuraray Noritake, Hu-Friedy, J. Morita Corporation, Henry Schein, Ivoclar Vivadent, Kerr, GC Australasia, SDI and Dentsply Sirona.

"I always take a look at the clinical situation and what I wish to achieve. The plethora of materials available in the market, along with their excellent functional and aesthetic performance makes it very difficult to choose at times," she confessed.

Moreover, Dr. Tam considers continuing dental education (CDE) vital as a dental professional. "Learning from motivated professionals is a lifetime process. To get better, one must not only look at one's own mistakes, they must constantly see how they can reinvent how they do something for the benefit of the patient, to reach a higher level of personal satisfaction and joy with their career."



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However, nowadays, Dr. Tam has noticed that the challenge is the increase in the availability of physical and online dental education resources which has consequently depleted interest of the once well-attended symposia worldwide.

“I still believe that the best way to learn is attending actual hands-on workshops, there is no replacement for this. I think it is still important to meet and learn from your peers. This is a significant part of how I grew and how I am still growing as a dental professional,” she remarked. Apart from those previously mentioned, Dr. Tam also runs a global clinical blog with multiple posts on a daily basis that helps to demonstrate techniques and approaches with her own patients in the hope that it may assist/help a dentist going through the same situation in other parts of the world.

Valuable advice

To all the young dental professionals and budding practitioners, Dr. Tam recommends having minimal dental equipment/armamentarium with regards to composite resins. She quoted Leonardo da Vinci's “Simplicity is the ultimate sophistication”. She added that companies are organising composite shades in order of value and moving to cloud-shaded systems, minimising the number of shades that dentists need (ex. GC Essentia, COLTENE Brilliant Everglow, VOCO Amaris), whilst not having to compromise on aesthetic excellence.

“Learn one brand, one system and see how far it can go. Most of the new body shaded composites not only are cloud-shaded but also have an amazing chameleon effect. Users definitely can make the most of the new body/posterior composites for all restorations classifications,” she surmised.

Furthermore, Dr. Tam highlighted that she is “Transforming lives, one smile at a time.” She views every case and every tooth as special. She understands that her job is to recognise and differentiate each case/tooth while generating uniqueness into whatever she does for her patient.

Work life balance

Dr. Tam shared that outside her practice, she is also a dog lover and her world revolves around her French bulldog, Arnie Gargamel Tam. In her free time, she can be found socialising with dog owners at dog parks.

When asked about what is in store in the future, she expects more people to embrace the digital workflow and not only printing digitally-based diagnostic wax-ups but also printing definitive restorations. “Fall in love with dentistry. Breathe it. Dream it. Obsess over it. And it will love you back,” she ended. **DA**

