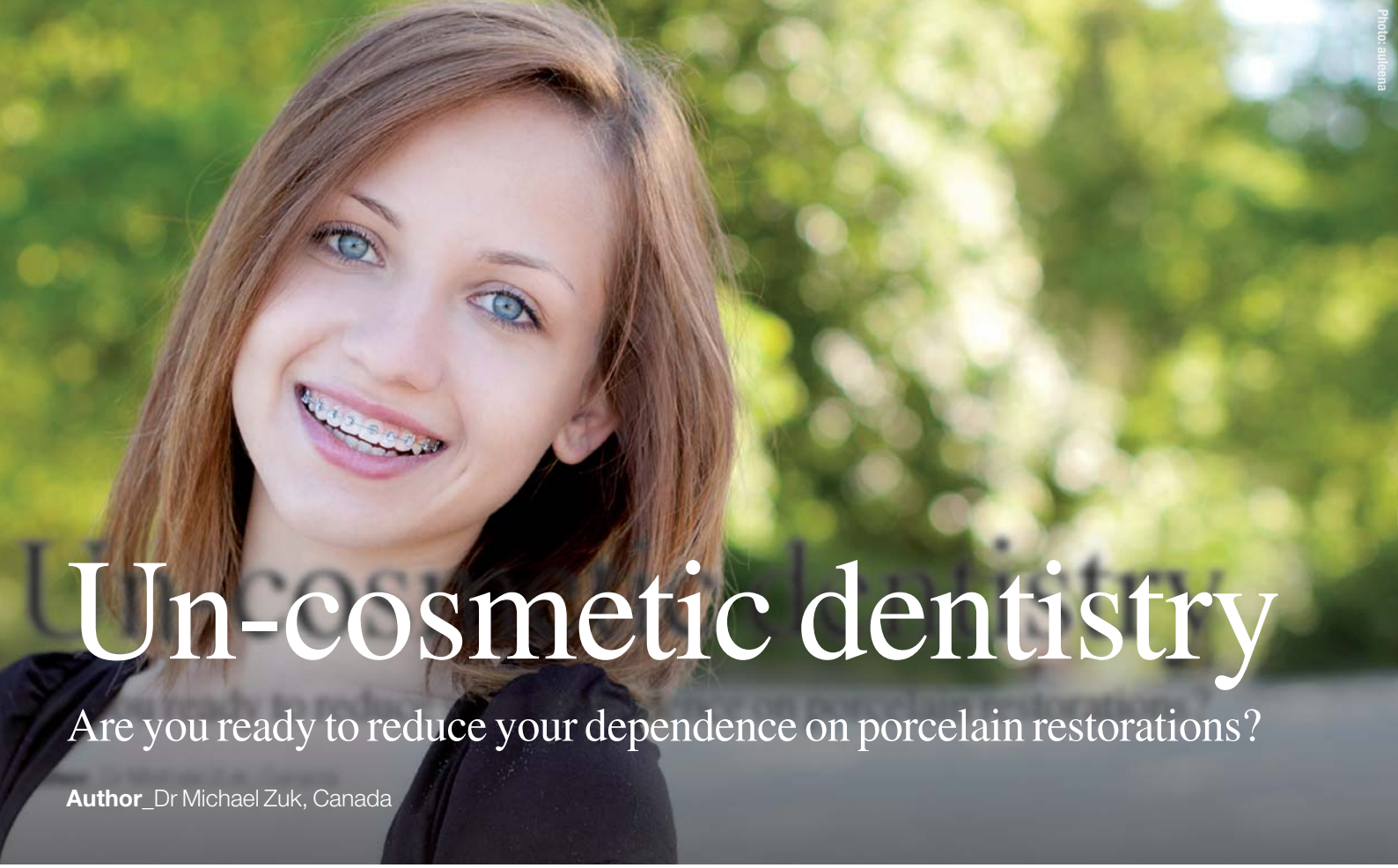


Un-cosmetic dentistry

Are you ready to reduce your dependence on porcelain restorations?

Author_Dr Michael Zuk, Canada

_While there are some occasional references to concern about the overuse of porcelain, many articles in dental trade publications show off before and after dental makeovers that from my perspective were quite satisfactory prior to expensive intervention. I will not argue that there are people who truly have displeasing smiles and they can benefit greatly from cosmetic dentistry, but all too often people with body-image issues related to a distorted perception of their teeth seem to be easy victims.

"Smilorexia" is the fanciful term I coined for this disorder, which appears to affect attractive young women more than others. If you open the pages of any journal published by the American Association of Cosmetic Dentistry, you will no doubt find at least one or two of these patients having extensive veneer treatment that could easily have been avoided with unbiased professional advice. The problem is that too many dentists have dedicated their lives to pure cosmetic dentistry, which is often based on using porcelain as a cure-all.

"It is time to adopt a significant change in philosophy..."

Sadly, many of the cosmetic dentists recognised as the top tier appear to use their standing as a licence to drill. It is time to adopt a significant change in philosophy if the dental profession wishes to maintain any level of integrity. Lip service to conservative cosmetic dentistry means nothing. To truly practise "un-cosmetic dentistry", a dentist must back away from ceramics and make use of composite to restore worn edges in combination with orthodontics to correct alignment.

This style of treatment does not have to be unprofitable. It does not have to be only for the simplest of cases either; actually, very complex cases can be treated to a high standard when multiple disciplines are employed together. The collaboration of specialists can be one alternative, but for patients on a budget or in areas with lower access, a general dentist trained in advanced therapies can offer comparable results for a fraction of the fee.

_Biggest bang for the buck— The STO combo

Let's cut to the chase: if you are a general dentist and want to knock your practice out of the park with new opportunities, look at venturing into the realm of advanced shorter-term braces. I specifically say "shorter" because your goal needs to be always trying to be faster because people hate being in braces, and aligners are often too slow or they do not give the dentist enough control of tooth movement.

There are a number of dentists who promote STO, but I developed my own system before I had heard of any others so I have some different ideas. Frankly, levelling and aligning simple orthodontic cases is easy and can be learned through just a short course,

which these dentists (Drs Swain, Barr or De Paul) appear to teach very well. I would rather remain on the fringe of even these trend-setters, and offer my twisted perspective with less corporate influence.

As hugely popular as these STO courses are, there is however some potential for abuse by dentists who simply have a weekend course and no other training in orthodontics. While I would rather see a dentist do more orthodontics than veneering, orthodontists are partially justified for their concerns about GP orthodontics.

Taking courses alongside orthodontists and reading their journals, it is apparent that there is negative sentiment directed towards general practitioners who dare to bracket teeth. I do feel that a united profession is a favourable concept but, having experienced extreme levels of sabotage in my local area, I now refer less than in the past. Some other general dentists have mentioned similar problems (on online forums) with turf protection that appears oddly focused on orthodontics.

An article recently used the term "soft science" to describe orthodontics, and I would certainly agree that it is difficult to claim that orthodontists know the "right way to straighten teeth", since few of them agree on anything. The reality is that the schools of thought in orthodontics are as polarised as the holy war between the myo-centric doctors and the centric relation believers.

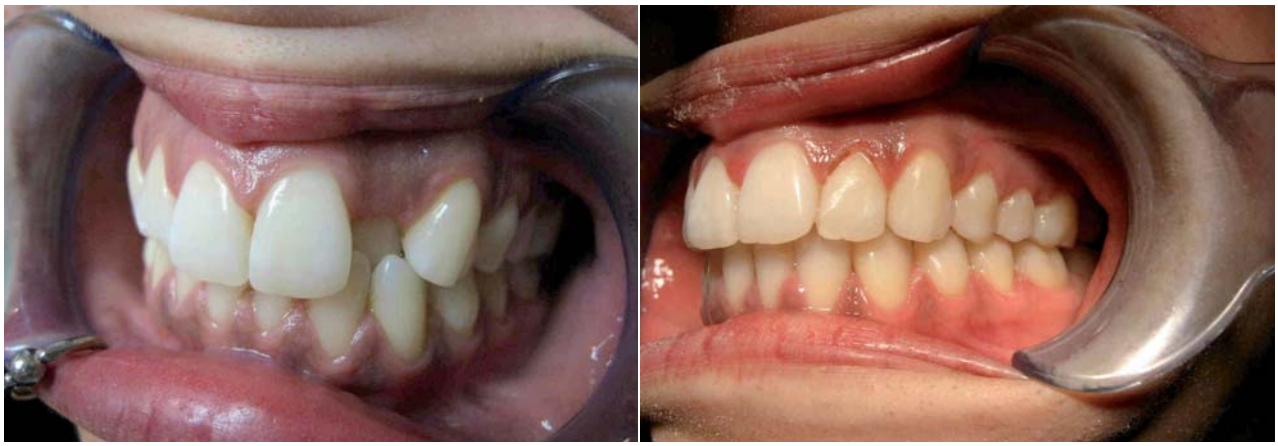
grow after all, and patients may be holding their jaw forward in a Sunday bite simply to get their uncomfortable braces off.

"I know, NOT ALL cosmetic dentists are Veneer Nazis, ..."

Orthognathic surgery may be vastly underutilised in some cases and overused in others. The use of TADs appears to offer some promise, and while an oral surgeon may find it a nuisance to bother with placing them, a general dentist may be able to get them in place with little difficulty. Orthodontists often tremble at the thought of using a needle (like I did in dental school), so the price goes up as the patient heads to the oral surgeon.

BIAS: *A particular tendency or inclination, especially one that prevents unprejudiced consideration of a question; prejudice*

So this article is obviously biased towards expanded skills for the general dentist, but I do respect the need to pick your battles in treatment and refer when the case demands it. I essentially do not believe in putting up with any rubbish from specialists who want to dictate what a general dentist can and cannot do. If you do not like my ideas, tough luck because the ones you have may not stand up under close scrutiny. I do not want to waste my time justifying anything I choose to do and if I am taking a course beside an orthodontist who is snivelling that he will start doing fillings and extractions, that is awesome; I may have an opening for an associate.

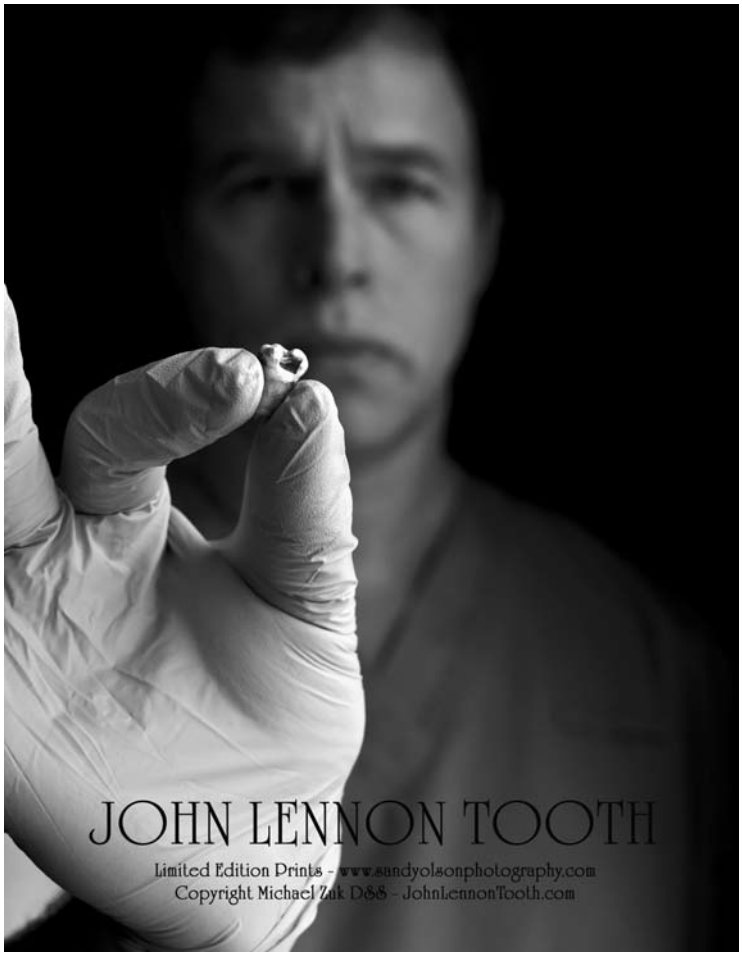


Anterior alignment is completed in extremely short periods of time, as in this example the lateral incisor was proclined in only 3 1/2 months. (DTI/Photos M. Zuk, Canada)

As an example, the use of the Herbst appliance forces the TMJ forward, in an attempt to correct a deficient mandible. This is like someone standing on the balls of her feet to be taller. While the practice appears to be commonplace, there are orthodontists who would never use this technique on their own children or grandchildren. The studies always seem to conclude with a recommendation for long-term data, but the device has been used for 100 years already. Mandibles are not stimulated to

As excited as I am about STO, I think a two-day course is only a taste of what you need to know. It is like taking a two-day selfdefence class and then thinking you can enter mixed martial arts. The problem is not what you learn, but the cases that you attempt

that are actually much more complex than you realise (you will be defeated!). You MUST take a full orthodontic course such as the one taught by Dr Richard Litt, and you are insane not to take a series of oral rehabilitation courses from Dr Frank Spear or Dr John Kois.



Dr Zuk is also known as the crazy dentist who bought a tooth from John Lennon. (DTI/Photo courtesy of Sandra Olson, Canada)

Adult orthodontics is full-mouth reconstruction, and the treatment of worn dentition is too important to overlook. In fact, orthodontists have a very difficult time trying to treat adults with worn dentition, so I consider this a very good niche for doctors ready to invest in cross-training.

I have seen an orthodontist try to treat an advanced wear situation with full orthodontics, and the result was all wrong. Instead of allowing for the restorative material, the practitioner moved the short teeth into place as if they were full size, so when we wanted to lengthen the worn incisors the result was a posterior open bite. The easier way to treat the case would have been to build up the teeth with composite prior to starting the orthodontics.

Cosmetic dentists have a tendency to veneer everything. They veneer teeth straight because they claim braces take three to four years. They veneer teeth to get rid of wrinkles and headaches. They veneer teeth to whiten and straighten them. They veneer teeth because the old veneers break. Exaggerated times in braces are often lies that need to be corrected as soon as possible to stop the abuse that is going on. Cosmetic dentists need to reprogramme to back off and get some air. And orthodontists need to give a little elbow room to their referring dentists who want to offer some orthodontics. The smart ones maintain a positive relationship and often see referrals from the primary care dentist increase. I know, NOT ALL cosmetic dentists are Veneer Nazis, and NOT ALL orthodontists tell patients that GP orthodontics causes root resorption.

My suggestion for breaking an aesthetic obsession is "cosmetic detox", which is very difficult if you have focused your training on aesthetic dentistry. The easiest way to do this is to take porcelain veneers off the table in the treatment planning stage. Composite resin can be used conservatively with orthodontics to provide a near-complete medium to long-term solution.

Any time you stick to a single series of training programmes, you start to pick up biases that warp your thinking. You will find that the ideas within the dental profession are as extreme as the religions and political beliefs around the world. The proponents of the various philosophies can be very convincing, but I think each doctor needs to take a step back and make up an individual philosophy that puts the patient first.

If you take the average patient, this means that you will offer fast, affordable, reversible and conservative treatment. Millions has been spent to make people think veneers are better than real teeth; I challenge that idea. Porcelain is not as good as healthy enamel, not now and not ever. Of course, it is a material that serves a purpose but often it is used simply to line the dentist's pockets.

So to recap this approach to care, I suggest you take an STO course from one of the two 6-month braces programmes, add a full orthodontic programme (ideally taught by an orthodontist who has taught orthodontics grad students), take a full-mouth reconstruction programme (or at least a worn dentition component), then if you want you can take a composite technique course.

I personally do not get fancy with composite, since my patients do not have loupes or want to pay double for advanced microscopic cosmetics. What patients do hate is composites that chip/stain. This brings me to use Clearfil AP-X PLT (Kuraray—no endorsement money yet!). Free-hand composite bonding is the best way to be able follow the

contours of the teeth, so scrap the idea of using a wax-up as an instant makeover if orthodontics would be helpful.

The Clearfil shade XL appears to have a chameleon effect that works for most shades of teeth. If a lighter shade is desired, then a cut-back technique can be employed to modify the final appearance with another shade/material like 3M Supreme (3M ESPE).

From my review of the CRA/Clinicians Report literature, this brand of composite is particularly strong in clinical use, and I have heavily restored cases that are still holding up after five years of service. The composite does not polish very well, so I have started using G-Coat as a final glaze, especially for smokers. I simply tell the patient that if he breaks the fillings, there is a 50 per cent warranty for the first 12 months, regardless of how they were broken.

With orthodontic treatment, you should, as mentioned earlier, try to rebuild any worn teeth before starting braces. Since you will be able to move teeth in three dimensions, you simply build up the teeth to full size and then you move directly into orthodontic records to get started. The occlusion should be left "high" and finalised with the braces.

The change in vertical dimension (VDO) appears to be another handicap that paralyses some dentists. If the patient does not have muscular problems and headaches, there may be no need to move into splint therapy to test a bite change. Simply by looking at the effect enamel replacement would have on the bite and considering how orthodontics could manage the result may be sufficient without an articulator. A less deep overbite and a less trapped mandible appear to be desirable within most schools of training.

The cosmetic training really will begin to come into play with incisal displays, tooth proportions and fuller arches. The arch form after orthodontics usually is very pleasing and mimics the technique of overlaying ceramic on the facial surfaces of the upper bicuspids. The term for this has faded from my memory because I tend to avoid courses that push the use of porcelain.

When I attended the UCLA Aesthetic Continuum, Dr Jimmy Eubank took a few moments to talk about a case in which a young teen had had her teeth disfigured with bulky veneers. He was forced to retreat her teeth but she had been compromised for life. As dentists, we are subject to many sales presentations disguised as courses and we rarely get the truth. The truth is dentistry is not easy and taking one weekend course will not be nearly enough. No guru is going to tell you all that you need to know.

At a recent course on anterior aesthetics taught by Dr Gerald Chiche at the Seattle Study Club, I was forced to prepare a number of veneers on plastic teeth. The burning smell reminded me of dental school, which brought back mixed emotions. I took away the idea of additive cosmetic strategies and the use of minimal reduction if choosing to use ceramic. Bonding to enamel instead of dentine still seems to be the better plan. (I also gave Dr Chiche a few photographs of John Lennon's decayed molar and he shared the fact that he had an original photo of the Beatle that was lost in Katrina—I hope he finds the copy sometime soon!)

"...the market is shifting towards dentists who are ready to mix up their training."

As one of the first dentists to combine STO concepts with advanced treatment planning of the worn dentition, I can honestly say that if you can set aside the use of porcelain veneers and substitute some of the treatment modalities mentioned in this article, you will eventually find a way back to ceramic usage with a better empathy for patient care. The public is becoming wiser and the market is shifting towards dentists who are ready to mix up their training.

As my UK dentist colleague Dr Martin Kelleher, who lectures on "veneerial" disease, would say, use the daughter test before you do anything irreversible.

I would add that you owe it to your patients to learn from the best in the profession, and cross-training in continuing education may be the best investment you can make in dental practice._

_about the author

cosmetic dentistry

Dr Michael Zuk is the author of the book Confessions of a Former Cosmetic Dentist. As a consultant to several marketing programmes, including HighSpeed Braces.org and KillerToothache.com, the dentist has cultivated unique niches as alternatives to the veneer-based practice model. He can be contacted at drz@bowerdental.com.