Vancouver orthodontist Dr Sam Daher is one of the world’s leading experts in clear aligner treatment. Having performed more than 4,000 treatments with Invisalign, he currently runs two practices entirely specialised in this treatment modality in addition to his other four clinics. At the recent British Orthodontic Conference (BOC) in Brighton in the UK, where he presented a paper on open-bite treatment with clear aligners, Dental Tribune had the opportunity to speak with him about the benefits of digital technology, the future of clear aligners in general and his business model.

Dental Tribune: Dr Daher, this is the first time you have spoken at the BOC. How was your presentation received?

Dr Sam Daher: I have never been to the BOC, but I have spoken in London many times before. I can recall my first talk to a UK audience a couple of years ago. Back then, the interest in Invisalign was not what it is today; perhaps owing to a lack of faith in the system. Today, far more experience has been gained and we have seen much better results with it, so there is generally more interest from specialists. The attendance of my lecture here in Brighton was amazing. There is clearly much interest and far greater acceptance than before. Also, the questions posed were far more genuine.

Your presentation here in Brighton focused on open-bite treatment with clear aligners. Could you summarise some of your key points for our readers?

One of the main advantages of clear aligners is that with them we can control the vertical dimension. One of the worst things we can do in open-bite treatment is to allow the posterior teeth to extrude. With clear aligners, we do not only prevent the posterior teeth from extruding, but actually intrude them a little, when needed, allowing us to control the vertical dimension and close the anterior open bite at a much faster rate than with any other fixed appliance as a matter of fact. Thus, what I aim for is to intrude the posterior teeth when there is already an anterior open bite. With both an anterior and posterior open bite, we create a mandible that simply autorotates and that will help close the anterior open bite.

ClinCheck and digital scanning have advanced clear aligner treatment. What impact have they had on digital technology in the field? I have been using scanners for six years and have not taken one conventional impression since then. The first thing one notices when one starts using scanners is that aligners adapt so much better to the teeth because the scan is far more accurate. Second, it allows for an improved patient experience. Using polylactic acid material is always a hassle and a discomfort for the patient if the material gets into the mouth. Using scanners saves a great deal of time and is more comfortable for the patient.

Furthermore, with ClinCheck, which provides 3D treatment planning, I am able to plan different approaches and then decide for myself. If I am still not certain, I can show the patient what each treatment outcome will look like and then let him or her decide. This way, it becomes an educational tool that can enhance patient compliance.

Aligner treatment is not without its critics. Is there any justification for this, in your opinion?

The aligner market has actually advanced quite a bit and this development is based on science, technology and experience. Aligners are custom made and that alone should be enough to elicit a positive response to aligners. What I personally like about this treatment modality is that the aligners do not apply a great deal of force, maybe 10, 20 or 30 grams. Research has shown that this is the optimal amount of force: strong forces are not actually needed. Also, the clinical achievement is really in the hands of the orthodontist. There is very little downside to this as far as I am concerned.

There are certain shortfalls. For example, patient compliance and sometimes teeth do not move as one intended, but that happens with fixed braces too.

What was obvious here in Brighton is that orthodontists are at a crossroads. What role will clear aligners play in the future, in your opinion?

I believe—and I said that already five years ago—that in ten to 20 years, a much larger portion of our patients will be treated with aligners as opposed to fixed braces. Braces have allowed us to understand the bio-mechanics very well and aligners just take that same knowledge and apply it to invisible aligners.

The future role of clear aligners is also determined by patients asking for this treatment. Dentists not yet using aligners have had to learn this treatment modality and quickly. Thus, its role is definitely defined by a combination of technology improving quite nicely and patients requesting it as an aesthetic treatment modality, for example. I am sure that the not-so-distant future half of all treatments will be done with aligners.

Where would you personally like to see aligner treatment heading in the future?

I think aligner suppliers need to provide auxiliaries as part of their systems too. At present, we obtain aligners from one company, but have to go elsewhere to obtain the elastic and transparent retainers. In a few years, companies will hopefully offer a comprehensive package to allow dentists to plan much ahead of time.

Another area where clinicians could benefit is being able to use different materials for the start and the end of treatment—just like in conventional orthodontic treatment where we use NiTi at the start of treatment and stainless steel at the end. However, there is a great deal of improvement in this regard already.

You run two practices entirely focussed on aligner treatment. What advice would you give a clinician who would like to switch to this business model?

It is important to first acquire the necessary clinical skills and become really comfortable using aligners. Treatment with aligners is not necessarily difficult, but it is a bit different, so it is necessary to become acquainted with it. The way to attain confidence is to treat enough patients—my guess is 1,000 or so. Once the clinician has become comfortable working with aligners, he or she can start thinking about switching.

Thank you very much for the interview.