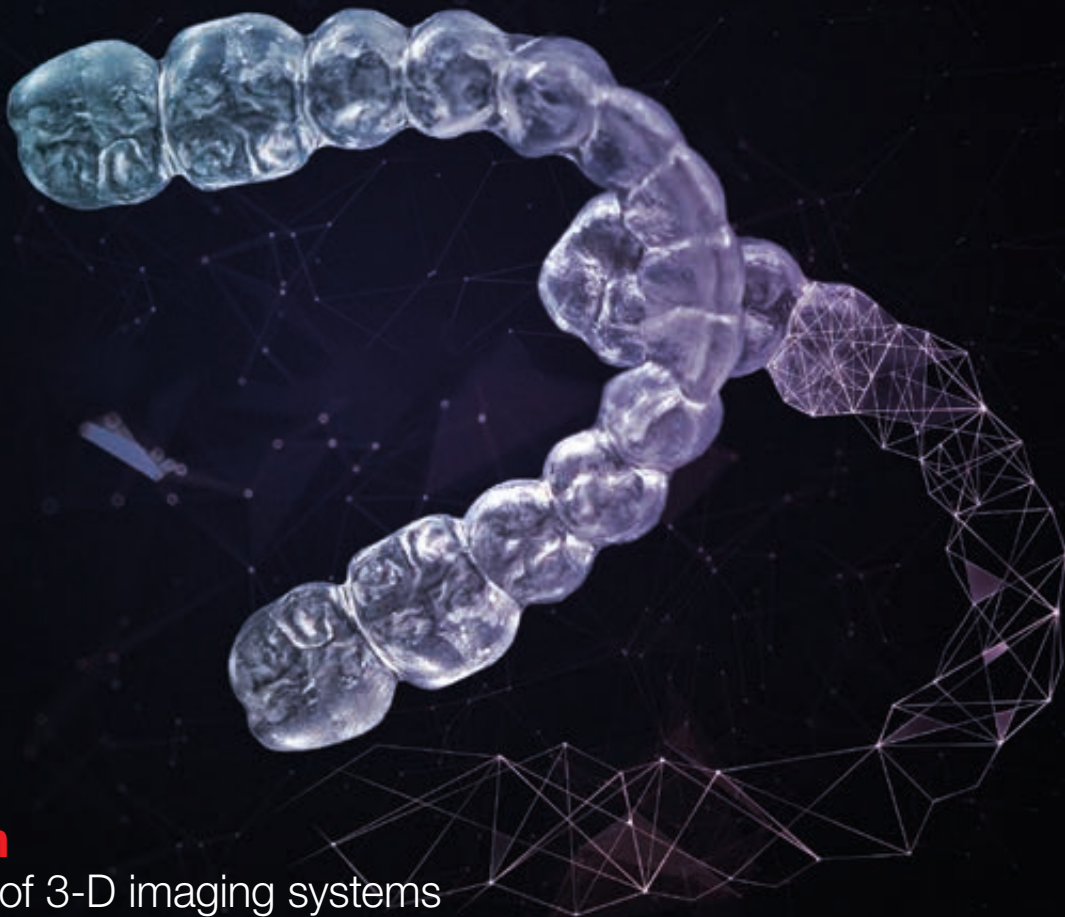


# ortho

international magazine of orthodontics

1 2017



## opinion

The role of 3-D imaging systems  
in present orthodontics

## case report

Widening the scope of  
aligner application

## industry news

“With 4-D printing we will be able to  
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# Dear Reader,



Magda Wojtkiewicz

**Dentistry willingly embraces** new technologies, digital imaging, 3-D treatment planning, CAD/CAM, 3-D printing, innovative materials, we can find them all in dental offices.

In the wild and wonderful world of technology, there is always a new trending topic. Right now, it seems that 4-D printing has become the hot new issue. Dr Sherif Kandil, experienced orthodontist, CEO of K Line Europe, believes that in close future the 4-D technology will change medicine in general and orthodontics in particular. In this issue of **ortho** magazine, we publish an interview in which Dr Kandil explains what this new technology is and how it can be used. 'In orthodontics, we will be able to provide patients a much more precise treatment that exactly meets their needs through customising the clear aligners or the orthodontic wire to change its shape when placed in the oral cavity to the requested final result. So it is crafting the final result with much more precision and with a smaller amount of clear aligners or wires so that only 1–2 aligners or 1–2 orthodontic wires are needed for the whole treatment', he says. Kandil envisions the 4-D technology entering the market in 2019 and change many applied current treatment concepts in orthodontics.

Aligner therapy is one of the fastest growing areas in orthodontics, this relatively new treatment method gained its popularity as an alternative to fixed appliances for tooth straightening. We can expect that the aligner market will advance and this development will be based on science, experience and new technology like 4-D printing.

However, aligner therapy has its limits, e.g. skeletal discrepancies that are normally treated with a combination of surgery and orthodontics. Yet, many patients refuse the option of maxillofacial surgery for many reasons and remain as they are. With the Carriere Motion Appliance—a new approach, developed by Dr Luis Carrière—orthodontists can provide a minimally invasive treatment even to more complicated cases. Inside this **ortho** magazine you will find a very well documented case report describing this new approach.

I hope you will find this year's first issue informative and enjoy all new techniques we would like to make you familiar with.

Yours faithfully,

Magda Wojtkiewicz  
Managing Editor



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COURSES  
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## CERTIFICATION COURSES

10<sup>th</sup> - 11<sup>th</sup> March 2017

**London | United Kingdom**

LANGUAGE: English

VENUE: Landmark Hotel London

AUSGEBUCHT

26<sup>th</sup> - 27<sup>th</sup> June 2017

**Tokyo | Japan**

LANGUAGE: English with Japanese translation

VENUE: InterContinental Tokyo Bay

07<sup>th</sup> - 08<sup>th</sup> October 2017

**Paris | France**

LANGUAGE: French

VENUE: Marriott Hôtel Champs-Élysées

27<sup>th</sup> - 28<sup>th</sup> October 2017

**Frankfurt on the Main | Germany**

LANGUAGE: German

VENUE: Hilton Frankfurt City Centre

## USER MEETINGS

12<sup>th</sup> March 2017

**London | United Kingdom**

LANGUAGE: English

VENUE: Landmark Hotel London

24<sup>th</sup> - 25<sup>th</sup> November 2017

**Frankfurt on the Main | Germany**

LANGUAGE: German

VENUE: Hilton Frankfurt City Centre

02<sup>nd</sup> December 2017

**Paris | France**

LANGUAGE: French

VENUE: Four Seasons Hôtel George V

WEBINARS ON REQUEST



# Taking on **work** **in progress** in practice transaction

**Author:** Amanda Maskery

## contact



### Amanda Maskery

is one of the UK's leading dental lawyers. She is Chair of the Association of Specialist Providers to Dentists (ASPD) in the UK and a Partner at Sintons law firm in Newcastle. Amanda can be contacted at [amanda.maskery@sintons.co.uk](mailto:amanda.maskery@sintons.co.uk).

When purchasing a practice, among the many factors clinicians need to consider is the situation regarding work in progress (WIP), an area that can be particularly complex in finalising the details of the transaction. Ongoing work that has not yet been completed, though it will have been at least partly paid for, could well take up a significant proportion of one's capacity in the early stages of ownership, so it is vital to know exactly what one is taking on. Furthermore, from the outset, buyers will need to be clear about the level of WIP against any payments already received, as well as the payments outstanding.

From the seller's point of view, it is therefore important that an up-to-date list of WIP be kept in the run-up to completion. The situation is easier regarding WIP if the seller is remaining with the practice, but if exiting completely, then careful determination of exactly what is to be inherited needs to be made at the earliest point. It also needs to be set out in the sale agreement the terms on which the buyer can claim fees for the work.

Some WIP will have been partly paid for by the time the transaction is completed, but there must be a consideration of how that will be structured. For example, if 75 per cent of the fees for the WIP have been paid by the patient, but only 50 per cent

of the work carried out by seller, it must be determined whether the buyer will keep the 25 per cent balance or whether this will remain with the seller at completion.

In many situations, the buyer will be able to claim a proportion of money in respect of the percentage of work he or she will be carrying out to complete the treatment. However, in other circumstances, a decision may be made not to pursue this. It could be deemed that cases paid up at the outset or partly paid and those paid at the end of treatment will balance out at completion, rather than carrying out complex calculations on each piece of WIP.

WIP can indeed be a complex area, so it is important that all parties involved in the transaction sit down and work through an up-to-date list of WIP shortly before completion and work out exactly what is happening with each piece of unfinished work. A carefully drafted sale agreement is extremely important in this scenario, and consulting specialist dental advisers is strongly recommended.

Both the seller and buyer need clarity on how WIP will be transferred and who will retain what percentage of fees. Establishing this will enable a smooth transaction to the benefit of the business and patients alike.



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**3M Oral Care**



# My complete conversion

## London lingual orthodontics provider Dr Asif Chatoo describes his navigation of digital technology

**Author:** Dr Asif Chatoo

**My professional journey has no end** or destination. If I ever felt satisfied by one system and I applied it in the same way without acquiring new knowledge or discovering more advanced technologies and materials, I would consider myself ready for retirement, which I am certainly not.

My voyage through digital technology, however, has just reached a natural conclusion. I realised recently that I had progressed through all aspects of digital technology as it relates to orthodontic treatment and I had completed a circle (Fig. 1).

My journey started with photography some years ago, but the process accelerated, and in recent years, everything has gone digital, including radiography, record-taking, treatment planning, and the manufacture of brackets and wires.

Over the course of my digital conversion, I have tried several different systems, all of which have delivered important benefits. The system I have used most as I completed the digital circle over the last two years is suresmile (OraMetrix). It is a treatment management system and among its benefits

is that I am able to provide a highly customised service in a shorter space of time, saving on average six months of treatment time per patient.

I have had a digital scanner for some time, but this month I acquired an updated 3Shape TRIOS scanner. It is extremely fast and allows my team to take completely accurate and detailed records of patients' upper and lower arches. In the past, the process took half an hour, but now it is immediate. Adult patients are particularly grateful not to have impressions taken, and the orthodontic nurses are delighted to avoid this most trying aspect of record-taking. It was invariably messy. Being impression-free has brought more value to the team than going paperless.

It goes without saying that a key benefit of digital technology is the integration of the orthodontic processes and records. For instance, a scan of the patient's teeth can be superimposed on to a photograph, which I can in turn integrate with a grid. I can relate the tooth positions to facial planes and check that the dental midline is centrally located. I can show the patient his or her teeth and bite and I can provide him or her with a visual simulation of the difference that treatment will make. The patient can then ask questions. My vision for the finished result may not be the patient's vision and being able to manipulate the outcome on screen means one can be absolutely sure the patient understands the treatment planning. The patient can influence the treatment if he or she wishes, and if he or she changes his or her mind towards the end, the technology allows for last-minute nuancing.

**“Being impression-free has brought more value to the team than going paperless.”**

In order to convey how this approach differs from other treatments on offer, I compare it to the difference between an off-the-peg suit and going to a tailor in Savile Row. Many of the patients I treat at my practice are referred by leading dentists. Their expectations are high. Sometimes orthodontic treatment is just one part of an interdisciplinary treatment that in its entirety will cost in excess of £20,000. Patients expect perfection—in so far as it is possible in an ageing dentition—and they expect a high level of service. Suresmile allows me to deliver both. Rightly for a West End practice, many of the benefits of suresmile relate to communication and the care of patients with high expectations, but there are also personal benefits for the clinician.

## The Scope of Digital Technology in Orthodontics



**Fig. 1**

In my case, there is one that surpasses all others. Bending archwires at the end of treatment is almost always inevitable and it is an aspect I dread. Why am I so hung up on this? The reason is that, if one bends a wire on one tooth, one will affect all the other teeth. This will increase the chairside time. The solution is the robotic wire bending that is central to suresmile.

I aim to deliver several things to my patients: an aesthetic result, a functional occlusion and an occlusion that is comfortable at rest. More than anything, I want them to be wowed by their experience. I believe suresmile delivers that wow factor.

I have gone 360 degrees and am now fully digital, but this is only the first navigation of new and evolving technology. My orthodontic journey continues and I suspect a few more digital revolutions await.

## contact



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