

aligners

international magazine of aligner orthodontics



opinion

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Dr Carlo Fornaini

Researcher, universit  Nice Sophia Antipolis, Nice, France
Researcher, university of Parma, Parma, Italy



The COVID-19 pandemic dramatically and totally changed all medical clinical practices owing to the necessity of limiting or, when possible, eliminating, physician–patient contact and reducing hospitalisation. This goal became a major concern and pushed researchers to discover novel modalities for managing medical and dental care in a broad range of situations. Beyond the pandemic, such telemedicine offers convenience, such as distance consultation and patient management, for oncological, geriatric and special needs patients, who may sometimes have difficulty coming to clinics, among other examples.

Tele-orthodontics, a term coined by Dr Taylor Squires, may offer a low-cost way of managing orthodontic treatment. It may help to reduce expenses, such as transportation and direct consultation with a specialist, and it may also aid general dentists in screening and appropriately referring potential candidates for orthodontic treatment. Through tele-orthodontics, it is possible to provide at-home orthodontic care and to monitor treatment progression by digital technology using a smartphone.

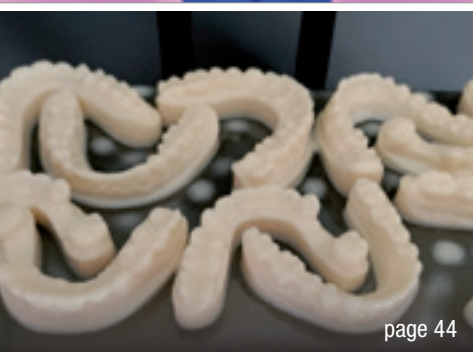
Aligner treatment offers the ideal situation: it allows the patient to independently progress through aligner trays, and this may decrease the number of in-office visits and so help orthodontists to supervise treatment progress even when the patient is at home. For this reason, we decided to dedicate this issue of *aligners* to the different points of view and aspects of aligner systems, to offer you a complete state-of-the-art overview of this new way of performing orthodontics, which is growing dramatically in popularity all over the world.

We think that you will find all these articles interesting, and we hope that they will also stimulate your daily practice.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Carlo Fornaini', written in a cursive style.

Dr Carlo Fornaini



Cover image: Orthosnap
www.orthosnap.com



editorial Dr Carlo Fornaini

03

opinion

The **role of the orthodontist**: Healthcare provider or salesperson? – Drs Anna Hajati & Mary Zafiropoulou

06

case report

Treatment of a patient with a **congenitally missing lateral incisor** using aligners: A case report
– Drs Iro Eleftheriadi & Christodoulos Laspos

10

opinion

Aligners: More regulation or just a **consumer product**?
– Dr Miguel Stanley

20

trends & applications

Effective application of interproximal reduction during aligner treatment – Dr Gina Theodoridis

28

feature

War in Ukraine: Dentists will not sit idly by
– Dr Miguel Stanley & Nathalie Schüller

32

How to make time **work for you** instead of **against you** – five time management tips for 2022 – Jerko Bozickovic

34

business news

Clear aligners: the **star** of 2021 – Jeremy Booth

38

research

4D-printed clear aligners found to show promise – Jeremy Booth

42

industry news

Making aligners digitally, the K and B way using 3D printing
– Kristen Benitez

44

industry report

Cast mould clear aligners: **Orthosnap** upends market with greater precision, lower cost – Jeremy Booth

48

Laser cutting—the future of **aligner manufacturing**
– Dental Manufacturing Unit

50

Release 12: New **Spark clear aligners** – Ormco

52

meetings

The third **European Aligner Society** congress in Malta proved a great success

54

EOS annual congress 2022—techniques may change, but the principles remain the same

58

International events

60

about the publisher

submission guidelines

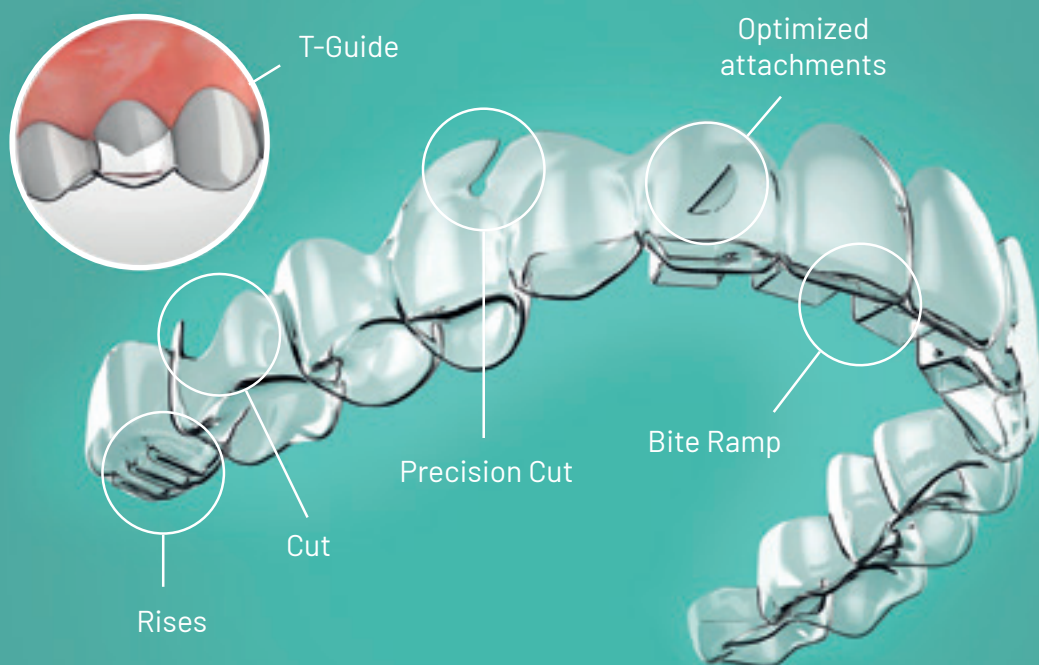
61

international imprint

62



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The role of the orthodontist: Healthcare provider or salesperson?

Drs Anna Hajati & Mary Zafiropoulou, Sweden & Greece



Introduction

The demand for gorgeous, perfect smiles has exploded in recent years. During the COVID-19 pandemic, the amount of time spent behind the screen, whether in Zoom meetings or FaceTime chatting with friends and loved ones, has given rise to a greater demand for whiter, straighter, perfect-looking teeth. Direct-to-consumer social media marketing is challenging the role of the orthodontist as a legitimate source of healthcare-related information for patients. In addition, advancements in technology have given the impression that orthodontic treatment is now very discrete, easy, fast and affordable for individuals looking for the perfect smile. These are the clear promises given to consumers. But is it that easy? And most importantly, is it true?

Patient or consumer?

Increased social media marketing involving messages aimed at attracting potential consumers to buy tooth straightening appliances and services has turned patients interested in cosmetic procedures into consumers. The most influential companies in the dental industry have been extremely successful in reaching out to their end consumers, patients, and consciously deliver messages aimed at attracting more customers for their

products. To reach out, they use influencers to create healthcare loyalty. Some practitioners, presented as key opinion leaders or another type of expert, have become a part of this ecosystem of a certain product or method. Prof. Kevin O'Brien assesses this practice on his orthodontic blog.¹ A key opinion leader is by definition a trusted, well-respected influencer with proven experience and expertise in a particular field. In healthcare, these leaders could be physicians, hospital executives, health system directors, researchers, patient advocacy group members, and more.

Some key opinion leaders gain benefits from promoting specific products that have little evidence-based support, turning them into profitable salespeople instead of healthcare providers. They go from serving a patient as a doctor to selling a product or method. Being part of such an ecosystem in turn efficiently increases the need for consumption of these marketed tools. Companies also market their brand through clinics, dentists and patients. Many clinics adapt to this without even realising it. People find the messages attractive, as they desire a happier life the invisible, easy and affordable way. Are the messages we send out ethical or even true? A study recently published in *The Angle Orthodontist* assessed claims mainly concerning treatment duration within Instagram posts on six popular marketed orthodontic products and found that only 2% of the 472 claims assessed were true.² This seems to imply that we need to ask ourselves whether our messages on our websites and social media posts are accurate.

Doctor-driven or artificial intelligence-driven orthodontics?

New integrations between medical imaging, planning, manufacturing, performance and communications have created many new opportunities for both dentists and patients. An orthodontist can capture records in one part of the world, and the patient can receive his or her appliances in another. A patient can start treatment in one part of the world and continue treatment in another part of the



world more easily than before. The course of treatment can even be tracked and monitored by the orthodontist from a distance.

Recently, even artificial intelligence (AI) has been implemented by companies for automation of treatment goals and monitoring. We should remember that AI in this sense is nothing more than algorithms implemented in a system by a human, based on calculations from reference material and predictions. These new technologies enable improved precision, save time and allow more flexibility. Many tend to believe that tooth movements can be planned and performed in digitally supported environments without having a dentist examine the mouth. The patient-turned-consumer can order the appliances online or go to a beauty salon or a store to have records taken

and appliances ordered. The treatment will start without anyone checking the teeth, gingiva or function or discussing preferences. It is an advancement of technology and it opens the door for even greater flexibility and automation. It is, however, a consumer-driven approach based on 3D renderings and does not take into consideration biology and other aspects, like function. In the future, could AI alone be enough to drive the orthodontic planning and treatment process, without input from an orthodontist?

The challenge

When a patient is turned into a consumer and a medically advanced procedure is marketed as a branded product, the information provided to the patient is skewed. We make it difficult for patients to make well-informed decisions when important information regarding their treatment is not communicated to them. When companies value a healthcare provider based on products purchased, he or she is turned into a salesperson, which has very little to do with his or her professional competence. Soft skills are difficult to measure and sell, so doctors stick to marketing and selling products. But if we, who have a duty to serve our society and our patients, do not provide ethical and accurate information, there is a risk that patients will suffer. Orthodontic care involves advanced medical procedures, requiring medical and dental history taking and consideration of a number of biological factors, like function and dental health status,



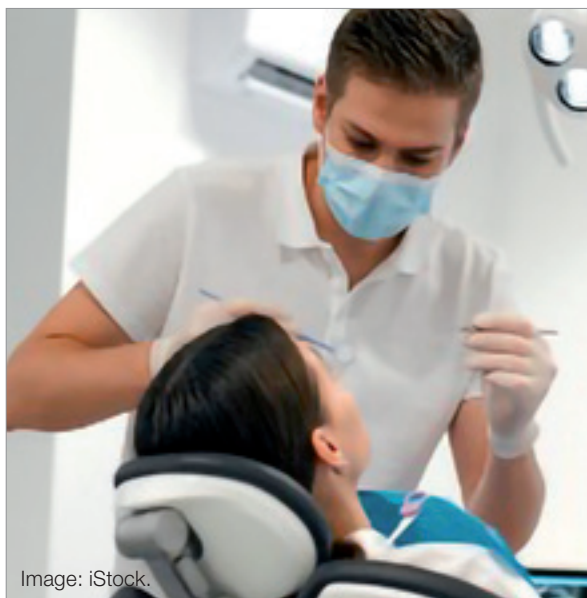


Image: iStock.

as well as dental, functional and skeletal diagnosis. In the long run, there is the risk that communication by orthodontists who have the competence to provide good and safe care will be drowned out and important competence will be lost.

Conclusion

With the advancements of technology, a new reality of endless possibilities is upon us. If orthodontists want to keep up, time and effort need to be put into learning these new technologies, always being mindful of using them to improve patient care. The appliance and approach best suited to each patient need to be figured out, as there is no one-size-fits-all approach.

A doctor spends his or her time educating patients and listening to their needs, is compassionate and honest, and builds trust and reliability. Information needs to come from the expert's mouth in an honest, unbiased way. We should all ask ourselves: who am I and who do I want to be? And how do I stand up for the ethical values that come with my duties as a medically trained specialist? How do we make patients aware so that they can make informed decisions about their short-term and long-term dental health? We all need to think about the consequences of what we communicate via our various channels. Although the profession may seem like it is entering a new era, the reality is that it might not be very different from the past. Its core values and belief systems are the same: patients' best interests are and should always be at the centre. Practitioners need to see patients as people and not consumers. There is a place for technology, but technology alone does not offer much if there is no skilled human behind to drive it.

about



Dr Anna Hajati is the founder and owner of OrtodontiAkademin, an orthodontic practice in Stockholm in Sweden, and has been employing digitally supported treatment processes since 2009 to improve treatment outcomes and the patient experience. She is the first orthodontist in Scandinavia to have successfully implemented the SureSmile Advanced platform. She obtained her DDS and PhD from Karolinska Institutet in Stockholm and her certification in orthodontics from the Centre for Orthodontics and Paediatric Dentistry in Linköping in Sweden. Dr Hajati is a member of the World Federation of Orthodontists, American Association of Orthodontists (AAO), European Orthodontic Society, Swedish Association of Orthodontists, and Dental and Craniofacial Bionetwork for Image Analysis. She is an elected ambassador for the AAO in Sweden.



Dr Mary Zafiropoulou is an orthodontist currently practising in Athens in Greece. She has been using digitally supported treatment processes since 2014. She is the first orthodontist in Greece to have successfully implemented the SureSmile Advanced platform. She obtained her DDS from the University of Sheffield in the UK in 2005 and her orthodontic licence from the University of Gothenburg in Sweden in 2011. Dr Zafiropoulou is a member of the World Federation of Orthodontists, American Association of Orthodontists, Hellenic Dental Association and Greek Association for Orthodontic Study and Research.

References:

- 1 O'Brien K. Who pays the piper? An influx of key opinion leaders. 2018 Oct 15 [cited 2022 Mar 09]. Available from: <https://kevinobrienorthoblog.com/pays-piper/>.
- 2 Alkadhimi A, al-Moghrabi D, Fleming PS. The nature and accuracy of Instagram posts concerning marketed orthodontic products: a cross-sectional analysis. *Angle Orthod.* 2022 Mar 1;92(2):247–54. doi: 10.2319/070421-530.1.

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