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CASE REPORT

A step-by-step description of the implant treatment and restoration of a patient who had undergone extraction of a maxillary right first molar and second premolar.

Page 7



INTERNATIONAL NEWS

Read all about third-quarter financial results from the main international dental companies and gain insights into the latest trends in the global dental industry.

Page 10 & 11



UPCOMING EVENTS

Next year will be an exciting one with regard to dental events. Highlights of 2024 will be the first Digital Dentistry Show and a new edition of ROOT SUMMIT.

Page 14 & 15

Increasing awareness of menopause in dentistry

Many Menopausal women consider leaving the dental profession owing to a lack of support and understanding from their employers or managers.

By Iveta Ramonaite,
Dental Tribune International

The hormonal changes that women experience in the menopause may cause cognitive, physical and psychological symptoms, and these are well established. However, the effects of the menopause on women in the workplace are still poorly documented and understood, and the topic is frequently stigmatised. Fortunately, in recent years, there has been strong interest in educating the dental community about the challenges that menopausal women face in the workplace and in offering employers advice on how to support them.



Symptoms of the menopause vary and may include hot flushes, brain fog, low mood—including depression—and insomnia. As a consequence, a woman going through the menopause may feel daytime fatigue and have difficulty concentrating. Commenting on employers' growing interest in managing the menopause, Vicky Kitney, from human resources firm Peninsula, said in a press release: "With the growing awareness of the need to support women with menopausal symptoms, we are seeing a steady stream of enquiries from dental practices about this issue."

► Page 2

Evolving your business systems into 2023 and beyond—Part 5: Operational systems

An article series on five basic systems to improve practice management.

By Chris Barrow, UK

Over the past months that Dental Tribune has published my article series, I have looked at financial systems, marketing systems, the patient experience, and leadership and management. In this last article, I will now reach a conclusion of our journey by looking at operational systems—how we run our businesses on a day-to-day basis, remain compliant and stay relevant in a changing world. To conclude my article series, I wanted to look not just at the present but into the future and try to make some predictions about what the world of dentistry will look like in the years ahead.

That is never an easy path to take. Which of the following three predictions turned out to be true?

• "I think that there is a world market for about five computers." —Thomas Watson, former IBM chairman, in 1940

• "I believe that at the end of the century the use of words and general educated opinion will have altered so much that one will be able to speak of machines thinking without expecting to be contradicted."—Alan Turing in 1947

• "There is no reason for anyone to have computers in their home."—Ken Olsen, founder of Digital Equipment Corporation, in 1977

I would be willing to bet that most people would have considered Turing's quote (at the time) to be the least likely to come true—and yet, here we are, discussing the impact of artificial intelligence (AI) on every aspect of our lives. As for the other predictions—red faces all around.

My first prediction is an easy one, given the current landscape: that digital will dominate every aspect of dentistry. We are already seeing the impact of digital workflows on our everyday working

lives, and I have taken to discussing with my clients what I call the "five revolutions" that are happening right now:

• *Revolution 1*: the correct use of the intra-oral scanner in every aspect of patient communication;

• *Revolution 2*: the role of the digital treatment coordinator;
• *Revolution 3*: the role of the modern dental therapist in the UK;
• *Revolution 4*: the use of off-site digital design and on-site 3D printing; and
• *Revolution 5*: the use of AI-driven software in smile simulation for patients before they begin treatment.

All these are game-changers. Add them together and you occupy a different plane of existence from "ordinary" dental practices. A practice that embraces these five revolutions does not have to worry about recruitment, retention, new-patient acquisition, treatment plan conversion, or sales and profitability targets. The five revolutions put the joy back into the practice and business of dentistry.



In this last part of his article series, dental consultant Chris Barrow discusses how dental practices can stay relevant in a fast-changing world.

► Page 2

These account for a small but significant number of cases, and the trend is increasing."

The effects of the menopause can last from a couple of years to over a decade. Since 77% of the dental team in the UK are women, including nearly 52% of dentists, 93% of dental hygienists and dental therapists, and 98% of dental nurses, it seems appropriate and necessary to discuss how the menopause can affect work performance. This would be helpful not only for improving staff morale but also for retaining skilled workers and for recruiting new staff more effectively. Concerningly, data shows that many women consider leaving the dental profession as a consequence of the menopause and the lack of support shown in the workplace.

"Research has shown that 10% of women leave their jobs and many more are reducing their hours or passing up promotions because of their menopausal symptoms. Ensuring colleagues feel supported is an important part of addressing this concern. It should also help in meeting the overall commitments set out in National Health Service England's Long Term Workforce Plan, which emphasises the need to retain valued employees by encouraging them to stay in the workplace," noted Debbie Herbst, a dento-legal adviser at the Dental Defence Union.

Many existing laws in place that regulate working conditions for menopausal employees are vague, and there is limited literature on the effects that the menopause can have on members of the dental team. However, many organisations and dental practices are

now considering adopting a policy that sets out how to support staff during the menopause. This also comes as a response to the increasing number of legal cases related to the menopause. Data shows that the number of menopause-related employment tribunals has doubled in recent years.

Promoting a supportive work culture

Paving the way for a more supportive work culture, the British Association of Dental Nurses (BADN) launched a menopause policy in March 2022 to help support staff experiencing symptoms in the workplace. In an interview with Dental Tribune International, Jacqui Elsdén, president of the BADN, stated: "I think it is really important for employers to understand what is being experienced. If an employee feels that she is listened to and understood, it

makes a great difference, and she will do everything she can to perform her work in the best possible way."

Elsden also noted that, although the menopause is a natural part of a woman's life, it is a taboo topic. Since previous generations were mute on this topic, women often do not have sufficient knowledge and awareness of the menopause themselves.

Improving working conditions

High temperature, humidity, poor ventilation, uncomfortable work uniforms, noise and a lack of access to quiet or restful spaces all contribute to exacerbating the effects of the menopause in the workplace. To improve working conditions for women undergoing the menopause, employers could consider workplace adjustments

such as the installation of air conditioning or the use of fans, the training of staff members about the menopause and the introduction of flexible working hours. Additionally, dental practices should foster open communication about the menopause and offer mental well-being support for menopausal women.

"Fostering an open, inclusive environment where employees feel they can raise concerns about how the menopause is affecting them with no stigma or embarrassment will help practices in becoming menopause-friendly employers," Kitney noted.

The benefits of adopting a menopause policy in the workplace include lower sickness absence and employee turnover as well as increased engagement and loyalty.

Basic simulation software has been around for a few years now, but the latest generation of AI-based applications is moving oral health education up by an order of magnitude in terms of patient engagement and treatment plan acceptance. Astonishing and exciting!

My friend Dr Colin Campbell from the Campbell Clinic in Nottingham in the UK recently blogged that dental businesses are changing from dentists who use technology to IT companies with a specialisation in dentistry. It is that mindset change that will identify the leaders in a future that is happening now.

My second prediction relates to team members. What of people in this changing world? What will the dental workforce of the future look like? Dental team members must be tech-savvy. The days when a long-serving team member (or clinician) resisted the advance of technology are now in the past. Everyone in the team has to move beyond beliefs like "I don't do spreadsheets", "I'm not very good with computers", "All this new technology is beyond me" or—most dangerous of all—"We don't need this; our patients will not want it" and "There's nothing wrong with the way we have always done things." If you hear that kind of language in your practice, it is a clear signal that you will have to change the person or change the person.

Whether in front of house, nursing, treatment coordination, marketing or administrative support, a future dental business will be driven by what has come to be known as a "tech stack"—the technology that is used to keep



the business wheels turning. Even in today's practice, the tech stack could include cloud-based:

- document storage;
- practice management software;
- customer relationship management system for managing new enquiries;
- back office project management;
- collections and accounting;
- private interteam online messaging;
- laboratory design communication;
- private patient communication;
- smartphone app;
- booking and chatbot;
- intra-oral scanning and smile simulation;
- CBCT scanning; and
- compliance.

All these can be designed for multi-location businesses so that all team members can have access to group informa-

tion and managers can work remotely. My prediction, therefore, is that the dental workforce of the future will be tech-savvy, specialising in dentistry and patient communication (particularly customer service excellence). It remains to be seen how long it will take for academia and training and development businesses to realise this—I rather suspect that it will be independent business owners that pave the way, by recruiting, training and mentoring their homegrown teams.

To keep the dental workforce of the future together, you will have to ensure that there are very good reasons for them to stay in dentistry and to stay with you. Consider these ten golden reasons:

1. **Money:** We must accept the bottom line here, that the pay is going to be very important, and so it must be

competitive. However, please make sure that you have done the numbers on production, pay, prices and profits to create a win-win.

2. **Team:** Provide the very best support both in surgery and throughout the business.
3. **Culture:** This must always be in the top three. Culture covers brand, vision, mission, values, goals—the difference that you want to make in the world. It is the unmissable experience of being a part of your business.
4. **Environment:** These are the physical facilities you offer throughout your building(s).
5. **Technology:** Innovation and early adoption are the key here—being able to confidently say that you are at the forefront in digital workflow.
6. **Marketing:** You must be able to reassure your clinical team that your internal, inbound and external marketing systems will ensure full books and a constant supply of new patients.
7. **Patient experience:** Your team needs to have the confidence that, from front of house to end-of-treatment review, you deliver a service that patients will review positively and share with others.
8. **Treatment coordination:** Provide the support of talented treatment coordinators to smooth the patient transition to treatment and to maximise clinical productivity.
9. **Mentoring:** Share your own experience and expertise with those around you and conduct regular peer review with your clinical team.
10. **Postgraduate training:** Encourage (and perhaps even fund) further education.

Do you currently deliver on the ten? When a new clinician is applying for a job with you or if an existing team member tells you that they are considering a move, ask yourself whether you are supplying these ten golden reasons to work as part

of your team and ask the team member whether the new opportunity that they are considering offers these ten golden ways to support them.

Thank you for staying with me throughout the article series. My hope is that I encouraged you to stop and think, to review what you have done in the past, what you are doing today and how you plan to evolve in the future.

This year is the 30th since my first business planning meeting with a dentist, and I am hugely grateful to a profession and a business that has given me a vocation, kept me busy and allowed me to make a good living and make the very best of friends along the way. In all these years, I have rarely been as excited as I am today about our collective opportunities in this great profession—we are innovating at pace and I am looking forward to participating in our bigger future.

Chris Barrow

has more than 50 years of work experience and has been active as a consultant, trainer and coach to the UK dental profession for over 25 years. His main professional focus is through his Extreme Business company, providing coaching and mentorship to independent dentistry around the world via virtual consultancy, practice visits, a workshop programme and an online learning platform. His blog, Thinking Business, enjoys a strong following. During the COVID-19 pandemic, Barrow created the Regeneration Coaching Programme to help practices to survive lockdowns and to bounce back higher after their return to work. More information on his work can be found at www.coachbarrow.com.

IMPRINT INTERNATIONAL HEADQUARTERS

Publisher and Chief Executive Officer:
Torsten OEMUS

Chief Content Officer:
Claudia Duschek



Dental Tribune International GmbH
Holbeinstr. 29, 04229 Leipzig, Germany

Tel.: +49 341 4847 4302
Fax: +49 341 4847 4173
General requests: info@dental-tribune.com
Sales requests: mediasales@dental-tribune.com
www.dental-tribune.com

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Metformin could help prevent oral and systemic disease in periodontal patients

Factors such as glucose metabolism, nutrition, oxidative stress and ageing drive periodontal progression. However, current periodontal treatments do not directly address the host's metabolic inflammatory response, which is crucial for the management of periodontal disease. Although systemic metformin is widely used in the management of diabetes, the medication has never been used in periodontitis treatment management. Now, a new study has reported that metformin helps control inflammation and glucose levels in the mouth and body and could be used as an intervention to help prevent both oral and systemic disease.

Research suggests that approximately half of the adult population over 30 years have some form of periodontal disease, and the figure increases to 70% in adults over 65 years and older. The disease is strongly associated with systemic conditions such as diabetes and obesity, and some studies have shown that controlling glucose metabolism in patients may contribute to longevity and decrease the development of periodontal disease. Similarly, it has also been demonstrated that patients successfully treated for periodontal disease improve their glucose metabolism and cardiovascular health.



In the study, the researchers investigated the effects of metformin, which is currently used as a first-line agent for glycaemic control, as a pharmaceutical glucose metabolism modulator. The medication was chosen for its cost-effectiveness, safety and potential for repurposing and to promote longevity in patients.

The study found that metformin led to significant prevention of bone loss during induced periodontal disease and age-related bone loss *in vivo* in living mice. The researchers then tested the use of metformin in patients with periodontal disease without diabetes, the first clinical trial of its kind. To test the effectiveness of the medication, half of the partici-

pants received 850mg of a placebo and the other half were given 850mg of metformin. All participants underwent full-mouth non-surgical therapy. The researchers reviewed the patients at baseline, three days later and a week later. Periodontal reassessment was performed six and 12 weeks after full-mouth non-surgical therapy.

The trial showed improved clinical outcomes in the periodontal disease treatment and in the control of glucose levels and inflammation in both the mouth and body, even when high levels of bacteria were present. In light of the data, the researchers believe that using metformin for periodontal disease prevention could also help control weight gain and glucose levels.

"Our patients do not often have any tools to fight against gum disease other than brushing their teeth, but for the first time, we have a potential tool that can help not only with gum disease but overall health," lead author Dr Vitor Neves, academic clinical lecturer and periodontics registrar at King's College London, said in a press release. He added: "Metformin is readily available around the world and is cheap, therefore allowing the drug to be used as a preventive medicine for oral and systemic diseases that could be adopted on a global scale." He explained that this would help many to age more healthily.

The study, titled "Repurposing metformin for periodontal disease management as a form of oral-systemic preventive medicine", was published online on 10 October 2023 in the *Journal of Translational Medicine*.

Vaping jeopardises oral health as much as smoking does, states EFP

Besides crippling health effects, smoking can cause serious damage to oral health, putting smokers at an increased risk of periodontal disease, tooth loss and even oral cancer. A trendy alternative to smoking favoured by the younger generation is vaping, which is often seen as the lesser of the two evils. However, research on its oral health effects is limited, and its claims to be a safer option than smoking conventional cigarettes have been oversold.

Nicotine, an ingredient commonly found in both cigarettes and e-cigarettes, restricts the blood flow to the gingival tissue. Other chemicals contained in the e-cigarette vapour, including formaldehyde, propylene glycol and benzene, may lead to serious dental damage and cause progressive destruction of the periodontium.

According to the European Federation of Periodontology (EFP), tobacco-smokers have a heightened awareness of the risks of smoking for general and oral health. However,

it stated that e-cigarette users are often misled into thinking that vaping is a less harmful option than smoking.

According to the World Health Organization, around 1.3 billion people worldwide are tobacco users, and tobacco kills over eight million people each year, including 1.3 million non-smokers who are exposed to second-hand smoke. Regular warnings

against vaping often only highlight the damage it causes to the heart and lungs, but do not refer to oral health, although as the EFP noted, evidence shows a clear and undisputable link between e-cigarettes and poor oral health.

"Damage on the gums and the tissues supporting the teeth, often to an irreversible state, is a likely

adverse effect of vaping," stated Prof. Andreas Stavropoulos, EFP's immediate past president and chair of the EFP's scientific affairs committee. "This damage includes permanent resorption of the gums and the bone that keep the teeth in function and in the mouth. Treatment of these problems, depending on the extent, is often cumbersome, and expensive," he added.

The EFP encourages oral health-care professionals to refrain from recommending vaping as a means of transitioning from tobacco use. Instead, health experts should prioritise offering smoking cessation guidance to individuals who use either cigarettes or e-cigarettes. Additionally, the EFP believes that dental professionals should provide patients with information concerning the potential adverse effects of vaping on oral health.

Other oral health-related side effects of vaping include halitosis, mouth and throat irritation, paratracheal oedema, laryngitis, black hairy

tongue, nicotine stomatitis, toothache, tooth discoloration, caries, tooth sensitivity, tooth loss, reduced enamel hardness and an increased risk of cancer.

Growing health concerns in the UK

According to research conducted by not-for-profit organisation Material Focus, a staggering five million single-use vapes are being disposed of in the UK every week—four times more than in 2022. Owing to growing fears about the health and environmental risks of disposable vapes, the government is reportedly planning to ban their sale in the country.

Scott Butler, the executive director of Material Focus, stated that single-use vapes are one of the most environmentally wasteful, damaging and dangerous consumer products ever made. However, according to *The Guardian*, the UK Vaping Industry Association is concerned that the ban would only lead to further harm, since the vapes would eventually be sold on the black market.



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Sugar tax may have reduced UK paediatric tooth extractions—study

Dental caries is the primary cause of elective hospital admissions among UK children aged 5–9 years, and the disease accounts for nearly 90% of tooth extractions in the age group. Given that consuming soft drinks is a risk factor for caries, UK researchers have examined whether a levy introduced in 2018 on sweetened drinks has reduced hospital admissions for carious tooth extractions. According to their findings, the added tax may have led to 12% fewer extractions in children.

The researchers examined the effect of the soft drinks industry levy on paediatric extractions of carious teeth by studying NHS hospital admission data from January 2012 to February 2020—a period that spanned the pre-announcement and post-announcement of the highly publicised law. They found that the mean incidence rate of hospital admissions per 100,000 inhabitants per month fell from 31.0 in the pre-announcement period to 28.5 in the post-announcement period, a reduction of 12%.

“Based on a population of 12,699,899 children aged 0–18 years in England in 2020, this reduction equates to an estimated 5,638 averted cases of hospital admissions per annum,” the study reads.



The observed reduction in hospital admission rates was greatest in the age groups 0–4 years and 5–9 years, totalling 6.5 and 3.3, respectively, which the researchers said was significant owing to the higher likelihood of younger children being admitted to hospital for carious tooth extractions. No significant change

was seen in the incidence of admissions in the age groups 10–14 years and 15–18 years.

Admissions were found to have been some five times higher in the poorest areas of the country; however, the reductions in the younger age groups were observed across all

geographies, regardless of deprivation status.

Prof. Sumantra Ray, executive director of the NNEdPro Global Institute for Food, Nutrition and Health, commented in a press release: “We welcome the publication of this research which attempts to draw the links between policy-

level changes and the impact on early life oral/dental health outcomes which, if untoward, would produce a significant onward burden on dental services through the life course.”

Prof. Ray continued: “The economic effects of this are more pronounced given current challenges in the provision of far-reaching dental health coverage both in countries with nationalised healthcare systems as well as others. Whilst there are methodological limitations in this study in regard to causal inference, this paper provides the basis for the design of further policy-sensitive research investigating these relationships in a manner that clearly links cause and effect.”

Introduced in April 2018 to tackle growing child obesity, the soft drinks industry levy, also known as the sugar tax, is a staggered levy applied to soft drinks sold in the UK. Drinks with 5–8g of sugar added have an additional tax of £0.18 per litre (€0.20), and those containing more than 8g carry an additional tax of £0.24 per litre.

The study, titled “Estimated impact of the UK soft drinks industry levy on childhood hospital admissions for carious tooth extractions: Interrupted time series analysis”, was published online on 14 November 2023 in *BMJ Nutrition, Prevention and Health*, ahead of inclusion in an issue.

Are haptic dental trainers better than phantom heads for dental curricula?

For dentists in training, options for honing their skills have been historically limited to phantom heads or patients at university dental clinics. Both options limit the dental student’s ability to repeat specific techniques, procedures and conditions. However, a study conducted at the Institute of Dentistry of Queen Mary University of London has found that including haptic training in the undergraduate dental programme was helpful in training for rare clinical scenarios, provided realistic feedback and allowed students to practise repeat procedures with the same patient parameters. This led to accelerated skill learning and improved confidence.

The COVID-19 pandemic and the immediate need to control aerosolised pathogens led to a reduction in patient-facing training, necessitating the exploration of safe, sustainable alternatives. With funding received for digital transformation, the institute invested in advanced virtual reality haptic stations and intra-oral scanners, aiming to enhance the

clinical competency-based dental curriculum. The haptic dental trainers by Simodont were chosen to introduce this haptic technology, and the addition was guided by a simulation-based dental education framework, which focuses on psychomotor skill acquisition and the collective impact on the teaching staff, curriculum and facilities.

The curriculum development followed a phased approach, rooted in the concept of deliberate practice, a method emphasising active engagement in task-focused training with immediate feedback. This approach was extended to haptic simulation training, aligning with the school’s existing education pedagogy and aiming to improve psychomotor skills through structured, repetitive practice and feedback.

The integration process involved collaborative work between the e-learning team and a newly appointed haptics teacher, focusing on transitioning preclinical learners’ psychomotor skills to a virtual reality

environment. Staff and students underwent comprehensive training to familiarise themselves with haptic technology. This included face-to-face presentations, online materials and hands-on sessions. The staff’s involvement was crucial in adapting

the curriculum and creating new haptic cases that mirrored traditional training while leveraging the advantages of virtual reality simulation. Utilising existing Simodont cases helped ensure the curriculum was designed to progressively develop

the students’ manual dexterity and technical skills.

The use of haptic simulators is regarded as far superior to working with artificial teeth in a phantom head; however, the study pointed out the need for further, comprehensive research to establish the long-term benefits and pedagogical effectiveness of haptic training. Given the substantial financial investment required for haptic technology, it is crucial to understand its impact on traditional training methods and patient clinics and to ascertain whether it offers any measurable advantages in terms of patient safety and educational outcomes. The study authors suggested that answers to these questions are vital for justifying the investment to funders and professional regulators in the UK and globally.

The study, titled “The integration of haptic training into the QMUL dental curriculum”, was published online on 24 October 2023 in the *European Journal of Dental Education*, ahead of inclusion in an issue.



Screw-retained restoration of a maxillary first molar and second premolar

By Dr Anthony Bendkowski, UK

Dental implants are widely accepted as a successful method for replacing missing teeth. The success of dental implant treatment depends on many factors, such as implant design, surgical technique, bone quality and patient factors. The aim of this case report is to present a step-by-step description of the implant treatment and restoration of a patient who had undergone extraction of a maxillary right first molar and second premolar, from the initial osteotomy preparation to the final restoration.

Case presentation

A 64-year-old female patient presented to our practice with a heavily restored dentition. Her failing maxillary right first molar and second premolar had been extracted by her general dental practitioner (Fig. 1), leaving an unbounded edentulous area. Radiographic assessment indicated that there was ample bone depth in the posterior maxilla to allow for satisfactory implant placement (Fig. 2). An implant solution was provided using two individual screw-retained crowns supported by two OmniTaper EV implants (Dentsply Sirona) and using a digital workflow with Primescan and Atlantis (Dentsply Sirona).

A full-thickness envelope flap was raised with relieving incisions, and the initial small round guide drill was used to mark the implant position. The site was enlarged with OmniTaper drills of different diameters, following the recommended drilling protocol. The initial osteotomy preparation was performed with a 2mm diameter OmniTaper drill at no more than 1,500rpm and with copious external irrigation with saline according to the surgical protocol (Fig. 3). An OmniTaper EV 3.8×11.0mm implant was placed in position #15 using the TempBase driver (Fig. 4). Both OmniTaper EV implants placed with the help of the preassembled TempBase abutments nicely aligned in positions #15 and 16 (Fig. 5).

Next, the large quantity of autogenous bone collected with the disposable BoneTrap (Dentsply Sirona) during surgery was used to augment the small bone fenestration (Figs. 6 & 7), and Symbios Xenograft Granules were layered over the autogenous bone (Fig. 8). Finally, Symbios Collagen Membrane SR (15×20mm) was trimmed to shape to complete the guided bone regeneration procedure (Fig. 9). The wound was closed with PGA sutures (Fig. 10), and radiographic evaluation was performed to

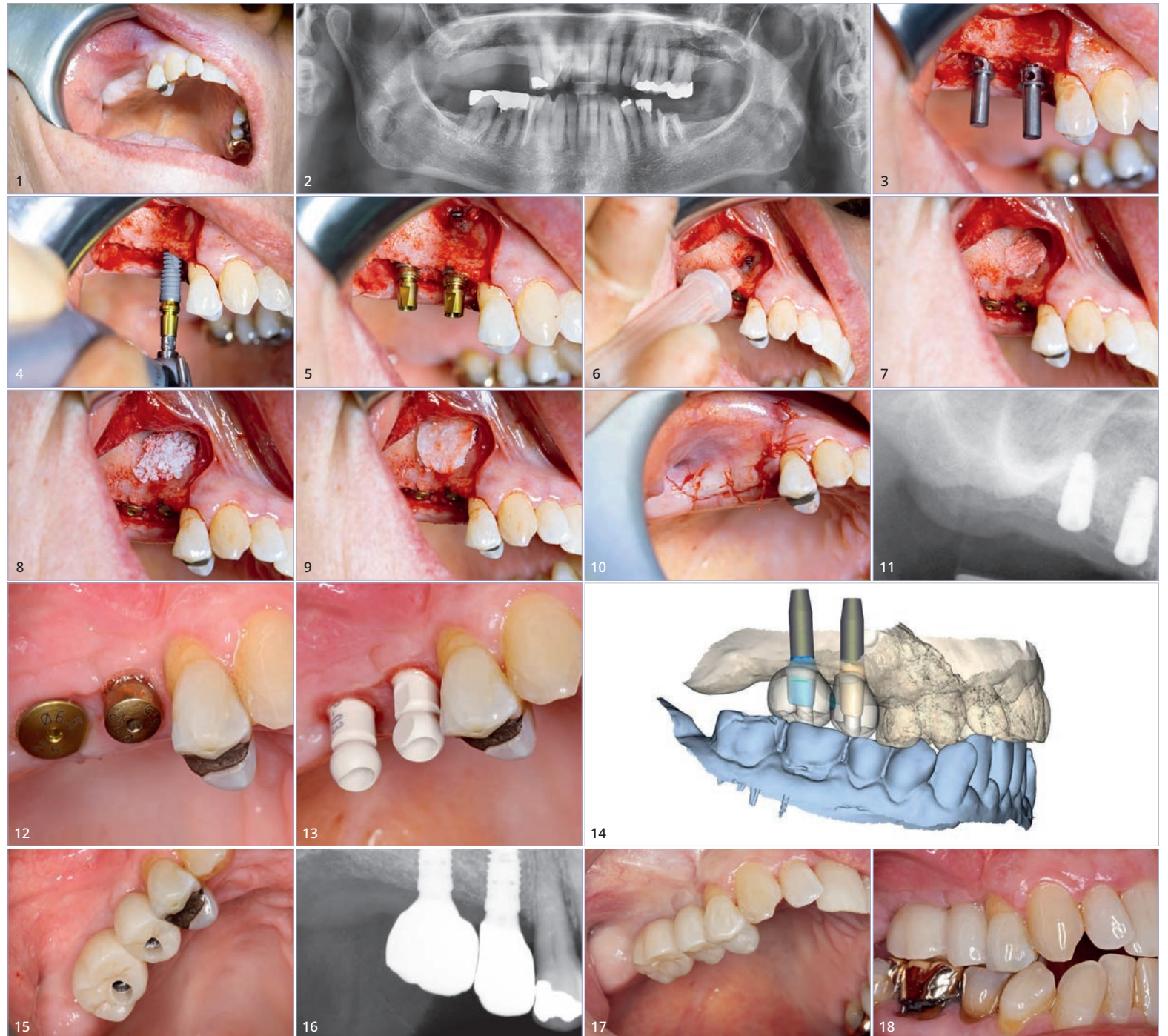


Fig. 1: Initial situation. **Fig. 2:** Pre-op radiographic assessment. **Fig. 3:** Full-thickness envelope ap and direction indicators after initial preparation with the 2mm diameter OmniTaper drill. **Fig. 4:** Placement of the OmniTaper EV implant in position #15 using the TempBase driver. **Fig. 5:** Both OmniTaper EV implants placed with the help of the preassembled TempBase abutments nicely aligned in positions #15 and 16. Implant-abutment connection size of medium indicated in yellow. **Fig. 6:** Use of the BoneTrap to augment the small bone fenestration. **Fig. 7:** Large quantity of autogenous bone collected from the BoneTrap. **Fig. 8:** Symbios Xenograft Granules layered over the autogenous bone. **Fig. 9:** Symbios Collagen Membrane SR trimmed to shape to complete the guided bone regeneration procedure. **Fig. 10:** Passive primary closure with PGA sutures. **Fig. 11:** Post-op radiograph of the implants. **Fig. 12:** Healing Abutments EV placed at three months after initial surgery. **Fig. 13:** Atlantis IO FLOs in situ ready for the Primescan digital impression. **Fig. 14:** Design of Atlantis abutments and zirconia crowns. **Fig. 15:** Well-fitting screw-retained Atlantis CustomBase abutments and zirconia crowns tried in. **Fig. 16:** Radiograph to verify correct seating of the restorations. **Fig. 17:** Screw access holes sealed and amalgam in tooth #14 replaced with composite. **Fig. 18:** Final restorations *in situ*.

verify the implants postoperatively (Fig. 11). Three months later, medium Healing Abutments EV were placed (Fig. 12).

A digital impression using an intra-oral scanner (Primescan) was then captured using the Atlantis IO FLO for a digital restorative workflow (Fig. 13). An Atlantis CustomBase solution, consisting of an Atlantis crown, an Atlantis abutment and an Atlantis abutment screw, was fabricated for each implant and tried in, and no adjustments were needed (Figs. 14 & 15). After seating, a radiographic evaluation

was performed to verify the final restorations (Fig. 16). The final restorations showed excellent soft-tissue adaptation and an aesthetic outcome (Figs. 17 & 18). The patient was extremely satisfied with the outcome of the treatment and the fixed restorations.

Conclusion

This case report highlights the successful placement of OmniTaper EV implants in a patient with a heavily restored dentition. The use of an intra-oral scanner and impression components for the prosthodon-

tic and technical digital workflow allowed for precise planning and execution of the treatment plan. The use of the OmniTaper drill system allowed for efficient and predictable placement of the implant.

Editorial note: This article was published in digital—international magazine of digital dentistry vol. 4, issue 2/2023.

Dr Anthony Bendkowski

is an oral surgery specialist in practice limited to implant reconstructive surgery with two clinics in London and Maidstone in the UK. He has over 30 years of experience in both the surgical and restorative management of implant cases. He is a past president of the Association of Dental Implantology, an examiner for the Royal College of Surgeons of Edinburgh Diploma in Implant Dentistry and a contributor to the postgraduate dental implant programme at Brighton and Sussex Medical School in the UK. He is co-chair of Bromley, Bexley and Greenwich LDC and an honorary consultant at King's College Hospital NHS Foundation Trust in London.



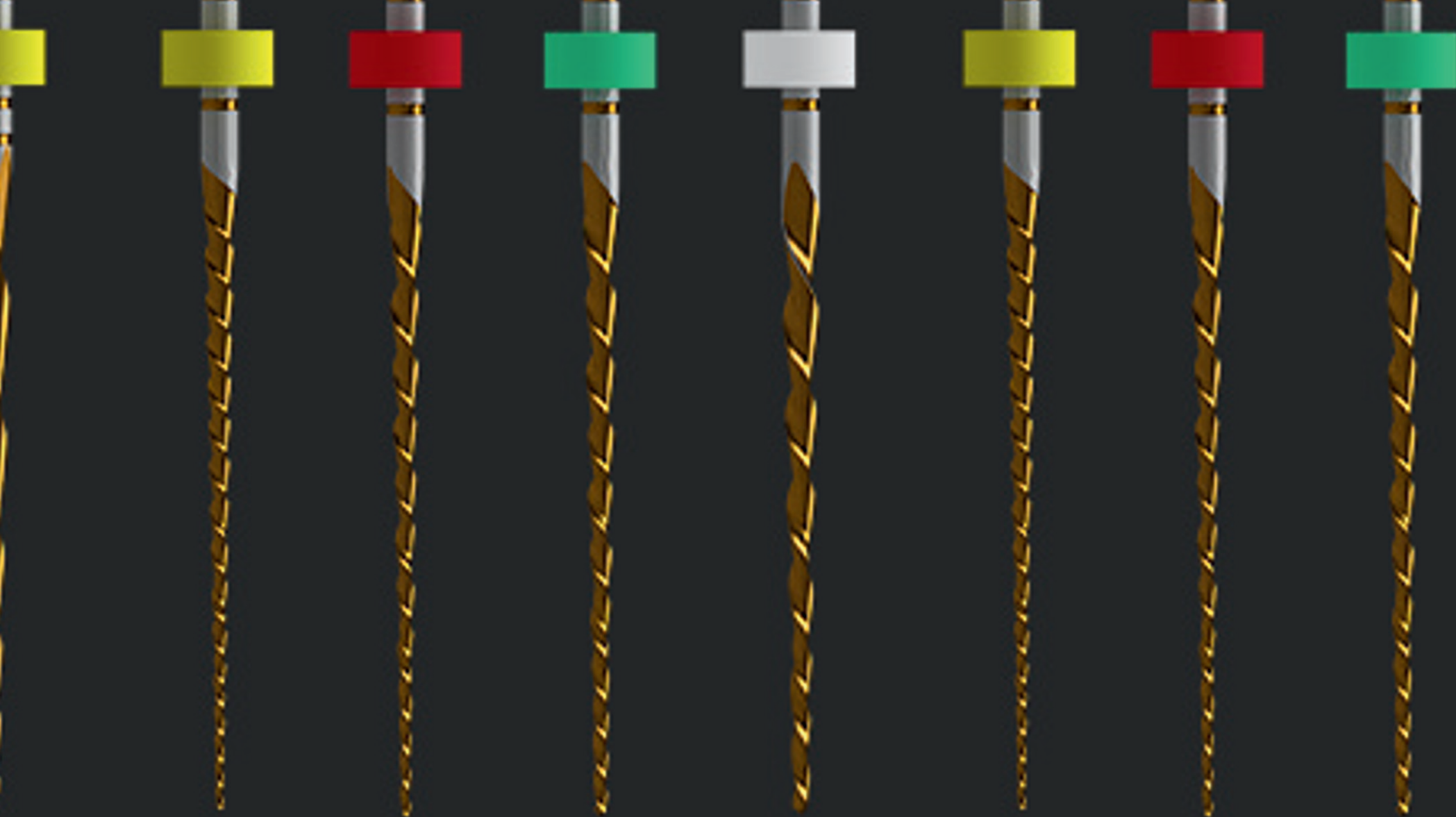


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