



British Institute
of Dental & Surgical
Technologists

CPD Article

ISSUE 28

Proud of our History, Looking Forward to the Future

This learning session has been judged as being equivalent to one hour of verifiable CPD. To claim your verifiable CPD you will need to answer the questions at the end of this article and submit them either by email to secretary@bidst.org or by post to the BIDST Membership Office 44-46 Wollaton Road, Beeston Nottingham NG9 2NR. You will also need to keep a copy of the article together with your feedback sheet and certificate for revalidation.

1 hr 
Verifiable CPD



Ref No. 36/01/01

"I was sceptical at first but having used the system for a number of months now; I can honestly say I couldn't live without it. Stunning results and surprising accuracy"

As technicians and dentists, we are bombarded by an array of new products and systems that come onto the market, with promises and guarantees. Months go by and the reality of the systems sets in. Cad-Cam is not only intimidating for most of us, but it is also technique-sensitive and so, when you get a bad fit or a short margin, the system and its team you have bought into, really needs to be there for you and should you be unable to achieve something and/or should the system not achieve what you want it to. You need to know where you stand so you need an educated realistic supplier.

My initial impression of this system was that it costs so much and that I would be buying into bad fits, and so on, I can only speak for the inLab System the way it is today. In the future, there are an array of new technologies, materials and products and, above all, patients' services that we can make available to all concerned. Yes, the time has arrived. There is some tweaking but, at last, I can see the end of the tunnel. The smog over products available to us and which way to turn to has finally lifted for me. I do ask myself when I think, "Is it because of my sizable financial commitment?" Well, the answer is a resounding No! For

me, my all-ceramic production is about 100 a month, anyway, so it has become easier. No waiting time or postage problems, as with other systems. Also, per unit, my production costs have halved in its entirety. The other advantages include all my units being stronger than ever before and the substructures being cut back digitally from computer-generated, full contour wax-ups. Our lives as technicians are becoming easier. We had come to a point that with patients' demand for cheaper and cheaper products, we could not afford to spend the time required to produce these products using techniques to ensure strength and quality aesthetics. This is all changing; we, with this machine and hours of training and experience, can produce fantastic aesthetics (unsurpassed with maximum all-ceramic strength, using the all-in-one tool, in a fraction of the time). The product range from single crowns in zirconia to feldspathic porcelain is designed to complement the manufacture of custom abutments in complementary materials of choice. It is taking the mess out of an artistic industry, as well as optimising the fits.

If only we could persuade dentists to forsake metal-bonded and reduce the potential toxins to all. We know that they last longer. Dental schools



Smile before treatment

preach from a dated podium about their reliability to their students some still feel amalgam is fine (all for longevity). Porcelain is only as strong as the substructure supporting it; too often porcelain can chip off, as we all know. Porcelain loses its optimum qualities after 10 years, anyway, so these dental schools should be pushing yellow gold crowns as a preference for this reason. Although many reports on yellow gold and its alloys such as, "Contact Stomatitis Author: Antonella Tosti, MD, Professor, Department of Dermatology, University of Bologna, Italy et al updated Oct 2009,(17.2% in 65 -99 year olds to dental materials). The only allergy I could find on the net regarding porcelain or glass is "Shop for National Allergy Supply Glass Home Furnishings", this is quite telling. And for Zirconium " ORTHO Super Site August 1, 2007 Orthopedic Metal Immune Hypersensitivity by Sam Nasser, MD, shows that it is preferred over

conventional hip replacements for its non allergic qualities. Not to mention our visual experience of those of us who have been cementing all-ceramic units for the last 15 years and noting the good gingival recovery as well as papilla regeneration within weeks of cementation of the units we make.

As we demand technicians to keep the prices down, metal support has been put on the back burner for many. As Prof Steel, who oversaw the present NHS contract and lowered our standards even more, stated, "We should expect a 3-year life out of a crown". In the private market, we insist on more than this and, if it is a family member, we send them to the best for the best as we all know in the profession what a quality lab can make.

Well, those that have a Sirona machine are treating their own with it. The best thing of all is to take a look at the strength results of the Vita Mark II VitaBloc. This material is etchable. (Can you all remember trying to remove an old feldspathic veneer and how a well-bonded one took 45 minutes to remove?). Well, this material has the same bond strength but none of the inherent porosities and impurities, thus maximising its strength to 160mpa instead of porcelain strength of 90 mpa on a good day. Hopefully, they will soon be offering a year's guarantee on the surgical and technical costs up to £700.00. (That will include our time, at last a product that is putting its money where its mouth is and thinking of the whole team. We will



During treatment shade tab, vita 3D, note distal incisal veneer preparation on 21

get to charge again if it fails – a 40% chance -- and patients will have an option to increase the warranty, as they would a washing machine, for up to 5 years). Patient service has arrived. I am able to offer a two and half turn-around time from start to finish, A patient arrives with the impression (or digital impression sent by email) and I can make the tooth, finish it, with its intricacies, and send it with the patient for crown cementation. I could make the initial block shade in two or even three colours and go from there. What a service, eat your heart out China!

With the onset of China and its budget dentistry, I believe firmly that the quality coming through at the moment is set to get even better and that we will soon be receiving most of our mass production units from abroad. The average patient is not interested in anything other than "compare the market .com". This is moulding our profession into a different type of dentistry. The only way of competing will be on turn around. At the moment, 500 dentists in the UK are able to offer a patient an hour and a half turnaround time for their product and they will not be going to China! We either need to join or carry on supporting old remnant technologies with Practitioners, and their whims and fetishes. (Quite often, due to insular self-exploratory professional lives, with little exposure to all the products available on the market, it is far too time consuming and expensive for most to explore and understand all options fully)??

So, for the down side! Well, I hate monopolies but there is nothing I can do about that if something ticks all the boxes then so be it. I also think that it takes time to learn a new way. With the new In Lab system, a technician can always ensure that every case can be finished to the highest standard as we have all



After treatment 1;2 ratio, incisal display

the extra equipment and expertise to do that . Dentists' results are not compromised if they take the time to be a technician as well, so polishing and glazing as well as optimising the margins, contacts, and ensuring translucency layers are in the right place. (For they soon realise that the time cost is high for that service if they charge an hourly rate of 200 an hour and a lab bill can be about £145. Including adjustments, all the units leave much more time to spend on aesthetics and strength, a luxury we have not had in the past.

Dentists still need this Sirona machine as it does open a whole new world for them and their patients they can offer the best patient service with it and make their own crowns very well with the time. They must be aware that being a technician is about a world they do not fully know and it is a profession on its own and not just about making a crown; they should support what we do in every way. If we lose our bread and butter, we will become more exclusive and rare. A careful hybrid is the way forward and it is what is best for the patient and the team.



After treatment , highlighting distal 21

I made a case for a patient the other day where the cores were not vital; the dentist trimmed and prepared the case, including colour-opaques the cores. On the day of try-in, you could see that the core colours were held at bay, with no supporting coping influencing the porcelain, and the crowns sitting on the preparations

on the try in at the lab (the porcelain was .5 mm thick on the labial). I eagerly await the 3-month check-up and photos. We all know the tissue reaction to all ceramic, so it will only get better.

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CPD Questions Ref No. 36/01/01

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Q1.) By what percentage have the authors production costs be reduced by?

Q2.) What life span of a crown should be expected according to Prof Steel.

Q3.) After how many years is it stated that porcelain loses its optimum qualities.

Q4.) What is the strength of Vita Mark II Vitabloc compared to porcelain?

Q5.) At present how many dentists are able to offer a patient turnaround of an hour half.

Name:

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Telephone no: (in case of any queries)

Signed:

Date:



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