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DENTAL ASSOCIATION OF MALTA
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Editorial

By Dr David Muscat

Dear colleagues,

Dr Henry Caruana passed away recently. Those who knew him will remember him as a very nice caring professional with always a smile on his face. He worked in his clinic Valletta almost to the end. He went about his daily life in a very calm and reassured manner. He always attended the St Apollonia events as well as the Lenten Sermons and some social events with his wife. He will be missed.

Between 20–23 March fifteen dentists attended the IvoclairVivadent training course in Schaan Liechtenstein. This was done in conjunction with the DAM.

On 4 April Dr Adrienne Busuttil presented a half day course/hands on – The Class 2 Composite at the University of Malta in conjunction with Bart Enterprises – Dentsply Sirona.

On 23 May we have a seminar entitled 'Predictable and Profitable Practice Techniques' by Dr Paresh Shah (Ultradent) organised by Marletta Enterprises at The Federation, Gzira.

This year sees the introduction of data protection regulations and we had a lecture on this on 30 May at the Hilton.

We are also planning a lecture in conjunction with KIN on Dentists Posture in the near future as well as a lecture on how to make the most of EU funds. Have a good summer!

We are currently planning our Christmas party.

The picture on the front cover is of Ghajn Tuffieha Tower and was taken by Dr Josef Awad.

To send an article to the editor please send on *editor@dam.com.mt*

Best regards,

David

Dr David Muscat B.D.S. (LON)
Editor / Secretary, P.R.O. D.A.M.

Above: Class of 1963 – Drs Hector Galea, Henry Caruana, Roger Vella, John Mercieca and Francis Zarb.

Left: Henry, Joanne and Rosanne in Madrid

OBITUARY:
Henry Caruana 1940–2018

The death of Henry Caruana in April 2018 has deprived the dental profession of one of its most respected and loved members. Henry studied at the Lyceum and University of Malta and graduated B.Ch.D. in 1963. He worked for some years at the Dental Department, St. Luke's Hospital and briefly in Sliema. He then he opened his own successful practice in Valletta latterly in partnership with Hugh Bonnici where he practised up to a short time before his final illness.

His ability and caring manner won him a large and faithful practice with many patients coming from outlying villages. He also established a reputation for domiciliary visits.

Henry's smile and quiet humour also made him a favourite amongst his dental colleagues. He was a keen supporter of the Dental Association regularly attending the scientific and social occasions. Together with Rosanne, they were invariably present at the St Apollonia celebration, right up to this year's. Henry was keen on music and in his younger days was a member of well known skiffle group and had also built up a good knowledge of Oriental carpets and their repair. There is many a prized carpet which he had beautifully restored. Henry and his beloved Rosanne were keen travellers and, with well researched journeys, covered most of Europe. I have very happy memories of a joint family trip to Madrid.

He married his beloved Rosanne in 1969 with Professor J.J. Mangion as a witness and me as best man. They had two children, John and Martina. Above all, Henry was a strong family man proud of Rosanne, his children and grandchildren. We offer them our sincerest condolences.

George E. Camilleri

EDUCATION. EXPERIENCE. ENGAGEMENT.

By Mr Andrew Jardine – Professional educator working in the Dental Industry

When your esteemed colleague Dr Muscat asked me to write something for the Dental Probe Journal I was delighted. Then the reality of trying to edit something for popular consumption kicked in.

What follows is a very condensed version of a much larger work, a decade in fact, of visits, meetings, creative and professional twists and turns. I hope it proves interesting to you and offers some inspiration along your way.

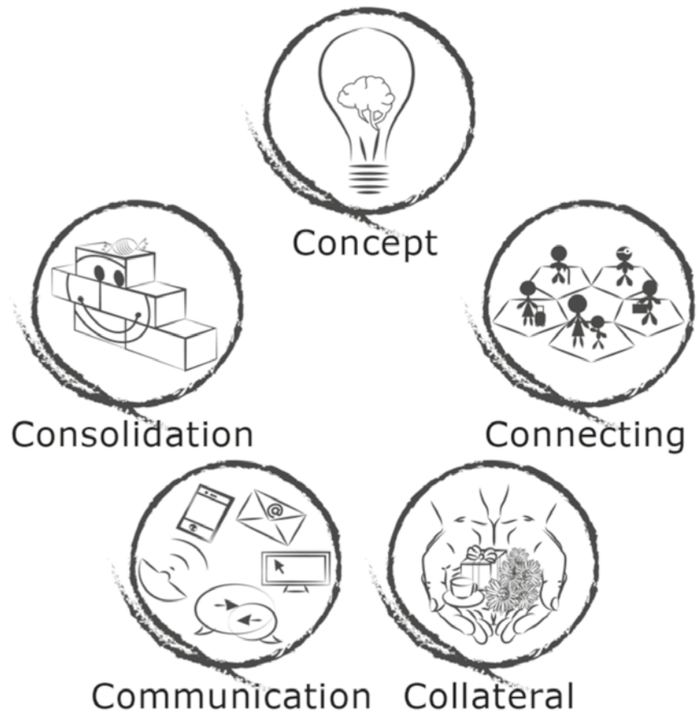
There are few hard and fast rules in business, 'the sand is always shifting beneath your feet' is a good one, as is Henry Ford's famous 'It is the customer (or patient) that pays the wages'.

When originally commissioned to design The Patient Experience my objective was clear, to give practitioners some practical skills to support case acceptance and practice profitability.

As I set out to research I discovered there are so many business development models and theories to choose from. I started sorting through some of the deadwood in order to develop something streamlined, that focused on your very specific, clinical business realities.

At first I failed horribly, in fact I failed horribly several times and in the end I decided to just invent my own! The model I present to you now have is based on five operational criteria, observed by myself and my peers over a 10 year cooperation with The Straumann Group. This criteria is what defines successful practitioners from those less successful.

Ladies and gentlemen (drum roll please), The Five C Model!



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EDUCATION.EXPERIENCE. ENGAGEMENT.

Continues from page 5.

Concept refers to the presentation of your overall 'offer' and the patient perceptions of the practice and team.

Connecting refers to how you reach out to new patients, keep in touch with existing patients, the use of social media and your referral and partnership networks.

Collateral refers to the type and quality of marketing materials and visual aids you use.

Communication refers to the delivery of consistent messages, of patient communication (in and out of the chair), treatment planning, price giving, objections and managing assumptions.

Consolidation refers to follow up strategies, incentives to be an advocate of your practice, and what is the last thing in the mind of your patient?

If you want to achieve consistent case acceptance it is important that you have all five criteria working in harmony. You may already have a great concept and a range of high end fantastic brochures, and even the ability to reach out to patients and influence them in making the first right decision. However, if communication in the practice is poor, if you (or your team) are not consistent with messages they give to patients, then standards (and case acceptance) will be the first to suffer.

CONCEPT

There is nothing new about the term 'Concept' although perhaps we associate it more with sketches of groundbreaking car design or as a method of packaging complex and detailed information. It's true meaning is 'a general idea' or 'something conceived in the mind'. What general ideas do you think your practice gives patients? The perceptions your patients form, what their minds conceive, means a great deal when it comes to deciding who should carry out a treatment. Do you really know how patients feel about your practice – when was the last time you asked? When did you last ask your team? Do your team ever ask patients? I'm sure it won't surprise you to learn your patients talk, they talk to each other, to their family and friends, sometimes even to people on the bus on their way home. Human nature dictates we are always more willing to share a bad experience than a good one. The French writer Gustave Flaubert once said, 'The good God is in the detail'.

Often the smallest things get the biggest reviews, whether good or bad and no matter how great an experience is, patients will often end up focusing on just one little mistake. Your attention to detail and that of your team is assessed on every visit, by every patient. But having expensive wall hangings and a state of the art coffee machine on loan from NASA are no replacement for good old fashioned one to one patient care. The relationships your team develop; interactions and creation of golden moments are what make a drop-in patient become a regular and loyal practice advocate.

CONNECTING

Having a good idea or skill and finding a market for that good idea or skill have gone hand in hand since the dawn of commerce and this is not something set to change any time soon. A new wave of practitioners, fresh from their long years of study are recognizing the need to be more effective connectors and their actions are changing dentistry. There are few industries that enjoy a safe and secure market, the customer has never been more transient and they are set to be even more so.

More freedom of choice, higher expectations and easier access to information are just a few obvious reasons. Patients may opt to move practice based on something as small as taking a dislike to a team member as much as having a major issue of care or unclear pricing. And they are more likely to share the experience with Facebook friends than write in and tell you about it. The medical industry faces the same competitive burdens that many other industry sectors have to face, the requirement of 'foot fall', having new faces through the door, getting bums in that chair!

Learning to successfully connect will relieve many pressure points for you as a business but being busy, seeing lots of patients, does not always equal profitability. Connecting is not just about letting patients know that you exist and what you offer, it is about targeting patients you know will find your treatments appealing. Connecting is anything from having a state of the art website, to online resources and diagnostics to a simple Facebook community page. It is also about collecting patient emails to send out a monthly or quarterly newsletter on recent dental industry developments and general staff news, along with offers and promotions.

Successful connecting strategies keep your practice firmly in the mind of patients and at the same time allows you to attract new patients. Be honest now, how often do you think about your doctor, even as a medical professional? Most societies today have a pathogenic health culture, the average person treats their health as they do their car and generally the right time to think about medical advice (or a repair) is when it is too late, when something really needs looking at.

COLLATERAL

Collateral is defined as 'accompanying' or 'auxiliary', 'additional', as in collateral damage but also as 'confirming', as in collateral evidence. With your effective and meaningful concept in place and all that connecting being rewarded, existing and new patients now all deserve (and expect) the best in terms of what accompanying, auxiliary, or additional means.

Continues on page 8.

EDUCATION.EXPERIENCE. ENGAGEMENT.

Continues from page 6.

To have their choice to come and see you confirmed as being a good one! Concept and Collateral go hand in glove, each defines the other and both can make or break the patient experience; from that initial point of contact with your practice right through to the final follow up appointment after treatment. Collateral is the physical media and tools you use to market and explain what you do. It is the primary vehicle for sharing what the practice has to offer, can highlights skills and experience and also promote upcoming educational events you have planned.

It is also found in the little extras like crockery instead of plastic or paper cups and a drinks machine that makes drinks you can recognize. Fresh flowers, a flat screen TV and up to date (relevant) reading material are collateral and all support your cause as being the right person to undertake a treatment.

Three key questions you need to ask:

- Is my collateral consistent with my practice concept?
- Is it effective in sharing consistent and positive messages to my various patient groups?
- And most importantly, is it influencing patients to make the right kind of decisions?

To put this in basic effective / efficient terms, think about the last time you went to stay in a hotel. As you step into the room that will be your home for the next few days what are those first things that catch your attention? Does the room seem to welcome you in? Is it tidy and clean? Is the temperature right, too hot, maybe not warm enough? To the TV, a Sony with a fully functional remote control?

You find the leather bound guest information folder, everything neatly typed, covering at least three major languages and no obvious spelling mistakes. Finally, it is freshen up time so you slip into a pair of nicely sized complimentary slippers and an oversized luxury robe and head off to check out the fluffiness of the towels.

In the bathroom you take a quick look through the toiletries, if you have L'Occitane then all is well and you can sleep easy tonight, if you have something unpronounceable, from the local supermarket, perhaps you won't!

Everything you experienced in those first few moments sets the tone of your stay and a truly great hotel company understand this. They know if they win your approval on arrival then the whole mood of your stay is influenced in a positive way. And a positive welcome influences a guest to go have a drink in the bar, book a table in the restaurant, to shop in the ridiculously overpriced lobby.

In contrast, you arrive to find a room smelling of smoke and windows left wide open so it is now colder than a polar ice-cap in there. The TV looks like a microwave and on its screen the receptionist spelt your name wrong for the welcome message, there is NO remote control to be seen! Hotel literature is two photocopied sheets of badly written A4 paper, thrown down next to the TV with a food stained menu on top, possibly to stop them flying out the window and in the wardrobe there is no luxury robe and only one slipper, roughly a size 17.

Hoping it may be a little warmer in there, you retreat to the bathroom only to find cheap flimsy towels, a broken shower and a brand of toiletries that don't even tell you what they are to be used for. Faced with the gamble of using shaving gel as shampoo you make your way back to reception under a thunder cloud. A guest from hell is bred through circumstances such as these and it is now a constant, uphill battle to satisfy the guest and everything the hotel says or does will be under close scrutiny.

The collateral you use varies depending on budget, your patient group and the suppliers who work with you, but general 'nice to haves' such as reading material, quality refreshments and flowers or plants should alway be at the top of your list.

COMMUNICATION

When we talk about communication within the practice, we don't just mean the direct patient communication, there are three main areas to consider:

1. Doctor to Patient
2. Staff to Patient
3. Doctor to Staff

DOCTOR TO PATIENT

- When you offer your treatment advice, how are you sharing that information?
- What is the level of technical content?
- Do you use drawings, diagrams, models, graphics?
- Do you ask checking questions to assess understanding?
- How well do you listen and how often do you assume?
- Could a child understand your diagnosis and treatment benefits?
- One last but very important thing, how do YOU feel about the cost of the treatment?

A number of you reading this may have, at some stage, attended a presentation and had no idea what was going on, what the presenter was talking about. Would you admit to it, raise a hand and ask clarifying questions? It's most likely not, who wants to volunteer to look like an idiot in front of their peers? Instead we just carry on, nodding away and perhaps if something catches our interest we go and speak to the presenter later.

You studied long and hard to become a dentist, how often do you talk to patients as if they were colleagues; expecting them to understand all those years of training? Something very important to consider is how you translate complex treatment information (and the benefits) to your patients.

STAFF TO PATIENT

- How consistent is your practice message within the team?
- What type of welcome or information gathering processes do you have?
- Do you actually know what your staff talk about with patients?
- Do they ask checking questions to assess understanding?
- How well do you think they listen and how often do they assume?
- Who keeps in touch with patients and how does that happen?
- What is your surgery team's perception of treatment costs?

Your team are the first point of contact for a new patient and for established patients could be a trusted friend. We rarely hear the phrase, "oh the Dr is such a great dentist, but the practice team are awful!" It can easily be the other way round because patients value your skill, even if you're not so socially skilled, and having a great team makes up for it.

Personal conversations that happen in public areas say a lot about your practice and the team, are these kept to a minimum or do your patients get to know the social habits and relationship issues of all of your team? There is a fine line between being patient and friend, it can be a veritable Pandoras' box.

Finally, if they are aware it is their responsibility, a team can provide excellent insight on how the practice is performing. They see it on the frontline, in real time, and with the relationships they create, patients are more willing to open up to them and give honest comments, the kind of things you would never get written on a comment card.

DOCTOR TO STAFF

- When you discuss treatment advice, how are you sharing that information?
- What is the level of technical content?
- Do you use drawings, diagrams, models, graphics?
- Do you ask checking questions to assess understanding?
- How well do you listen and how often do you assume?
- How often and how effectively do you train your team?
- Do you gather up and apply feedback from your team?

This is a cross-over of the two previous areas and if you wish to ensure consistent messages and effective case acceptance rates remember this; if you are not communicating effectively with the team, how can you expect them to communicate effectively with your patients? As the leader in a practice it is important you set a good example. You have a responsibility in fact, even if simply showing that you are willing to develop.

AND SO, FINALLY, TO CONSOLIDATION…

The Oxford Dictionary defines Consolidation, or to consolidate as:

1. Make (something) physically stronger or more solid: the first phase of the project is to consolidate the outside walls strengthen (one's position or power): the company consolidated its position in the international market.

2. Combine (a number of things) into a single more effective or coherent whole: all manufacturing activities have been consolidated in new premises.

In patient experience terms I define consolidation as the last thing to go through the patients' mind and it generally works on two levels. There's the time immediately after a diagnosis and treatment options are presented, when the patient leaves to think it over. At this stage having literature or diagrams that are easy to review, or simply checking in over the phone by a team member are good, simple examples of consolidation.

After treatment, when the patient leaves with their lovely new smile, consolidation is there to influence their final thoughts about the patient experience and decision for having treatment in the first place. And why is this so important? Because this affects their decision for future treatments and who they have treatment with.

So, back to the first level of consolidation. Imagine a patient is at reception making a return appointment with their trusted friend member of the team. They mention that you discussed having an implant and your receptionist, suggests "oh yes, they are good, but expensive…" Now what happens as your patient walks out the door to make their decision, what is the last thing going through their mind? Expensive…?

Consolidation is coffee and mints at the end of a meal, the little 'after the fact' touches such as a chocolate or smiley face with your bill. Good consolidation strengthens relationships and allows a patient to feel good about their decision, and if you are really good, in encourages them to tell their friends about the great decision they made. Which opens up the world of advocacy through word of mouth. And here's the really great thing; good consolidation costs nothing more than a few well placed words and earns its keep for as long as your practice is in business!

SUMMARY

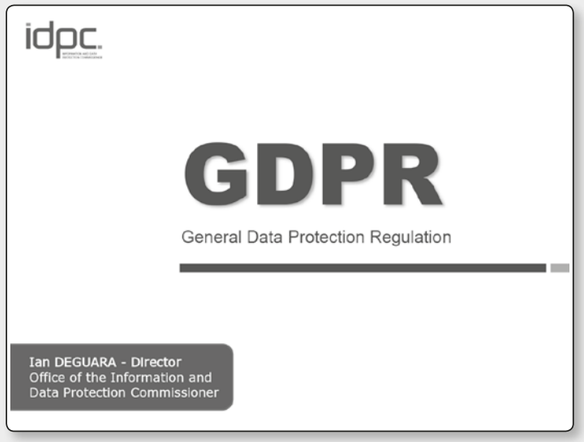
The Five C Model is a no nonsense structure you and your team can apply with a minimum of fuss or disruption. Taking time to develop a concept in line with your offer, making the right connections with both patients and peers and ensuring your collateral says all the right things about what you do are good 'efficient' starting points. Overly technical communication, with low levels of consolidation that do not support a patient through the decision making stages limit how effective you can be in the long term.

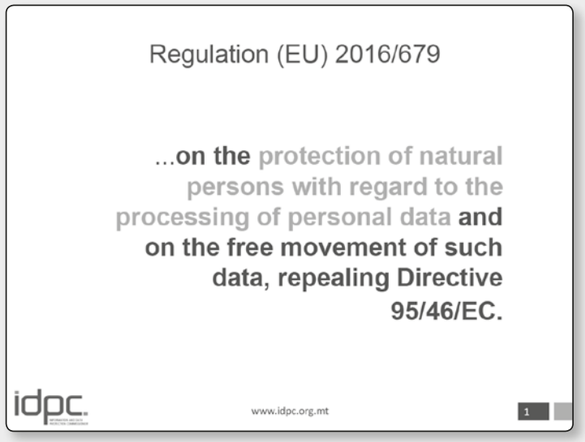
Not having clear messages and a structured approach for your implant patients and referral / partner networks only damages your ability to profit from this excellent treatment option.

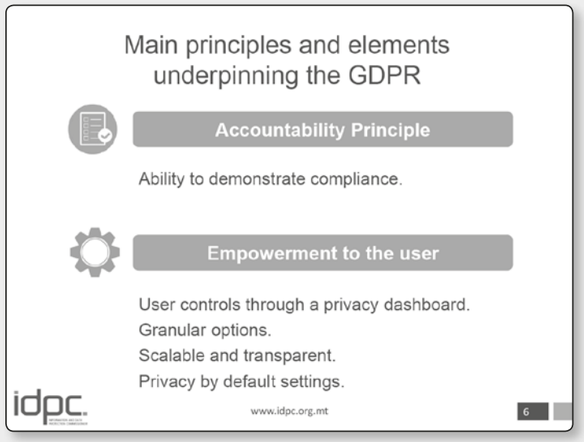
Regardless of your location, developing a practice in line with The Five Cs can support your ability to meaningfully advise and agree on a range of treatments. It supports maintaining the highest patient care standards, whilst enhancing your professional credibility.

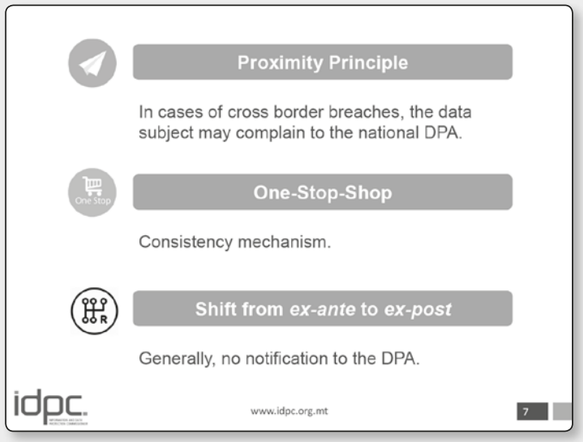
AN OVERVIEW OF GDPR

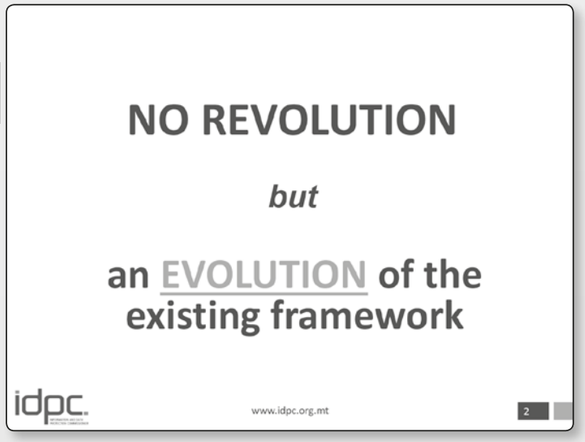
By Ian Deguara
Director – Office of the Information and Data Protection Commissioner

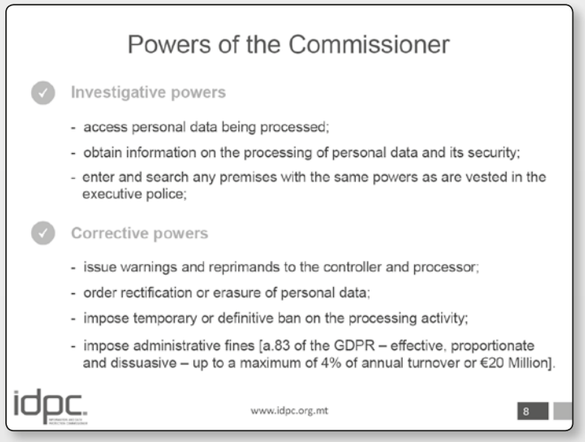


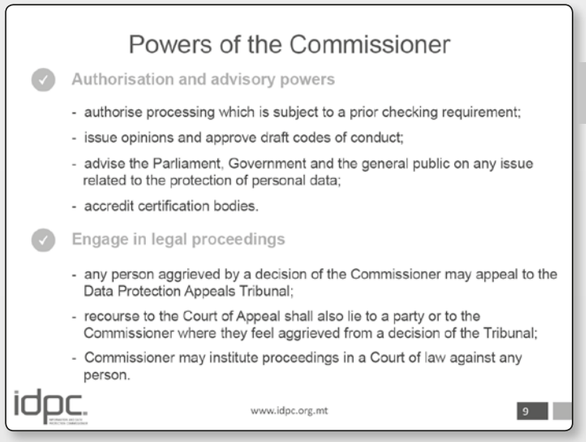


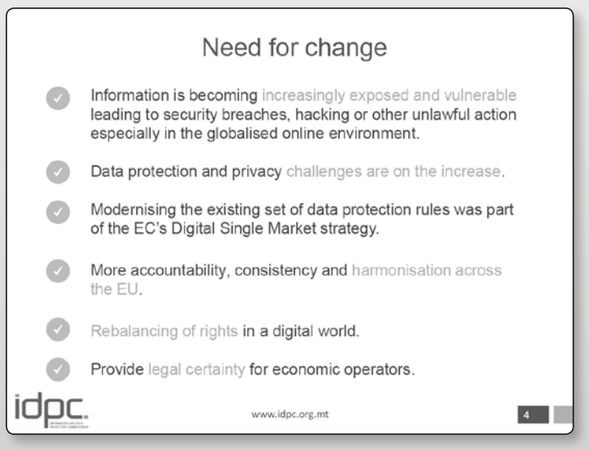


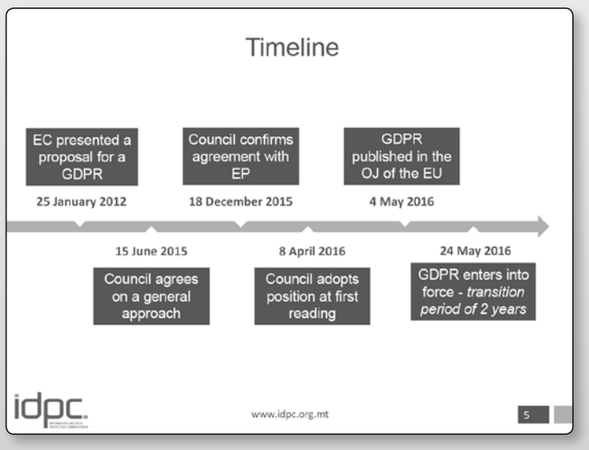


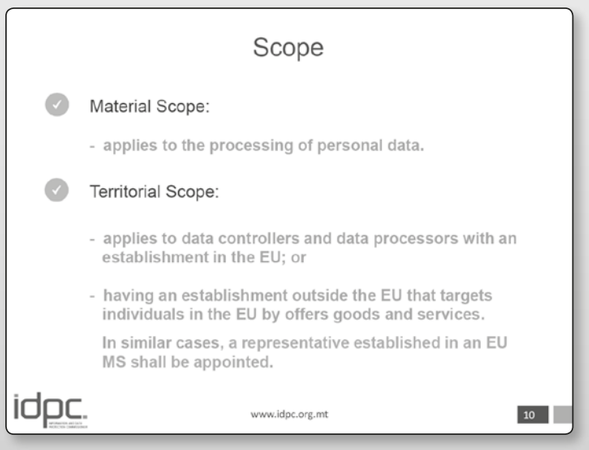


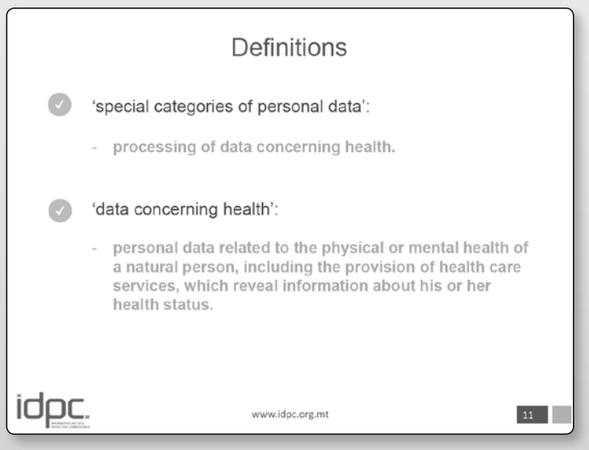












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AN OVERVIEW OF GDPR

Continues from page 11.

Legal Criteria to process Data concerning Health

- Article 9 (2) (h): processing is necessary for:
  - the purposes of preventive or occupational medicine;
  - the assessment of the working capacity of the employee;
  - medical diagnosis;
  - the provision of health or social care or treatment or the management of health or social care systems;
  - the services on the basis of Union or Member State law or pursuant to contract with a health professional.

idpc. www.idpc.org.mt 12

Conditions and Safeguards when processing Data concerning Health

- Such data must be processed:
  - by or under the responsibility of a professional subject to the obligation of professional secrecy under national law; or
  - rules established by national competent bodies or by another person also subject to an obligation of secrecy under the national law or rules established by national competent bodies.

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Restrictions

Pursuant to Article 23 of the Regulation, the data controller or processor is exempted from its obligations to accede to the data subjects' rights where it would be likely that its application would cause serious harm to the vital interests of the patient.

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Information to data subjects

- Transparency principle (A. 5(1)(a))
- Provided at the time the personal data are collected from the data subject (A.13)
- Information to include:
  - purposes of processing
  - the intention to transfer personal data to a third country
  - retention period or criteria used to determine that period
  - the existence of data protection rights
  - the right to withdraw consent
  - the right to lodge a complaint with the DPA
  - the existence of automated decision making.

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Information to data subjects

- Using clear and plain language
- Easily accessible
- Use of layered notices to avoid information fatigue:
  - information is not provided in a single notice
  - allowing users to navigate through the section they wish to read
  - first layer should provide a clear overview of the information *(information which has the most impact on the data subject)*
  - clear indication where to find additional information
- Incorporating in the architecture a privacy dashboard – a single point where to view privacy information and manage preferences.

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Retention of records

- General requirement (A.5(1)(e))

*"Personal data shall be kept in a form which permits identification of data subjects for **no longer than is necessary** for the purposes for the personal data are processed"*

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Continues on page 15.

AN OVERVIEW OF GDPR

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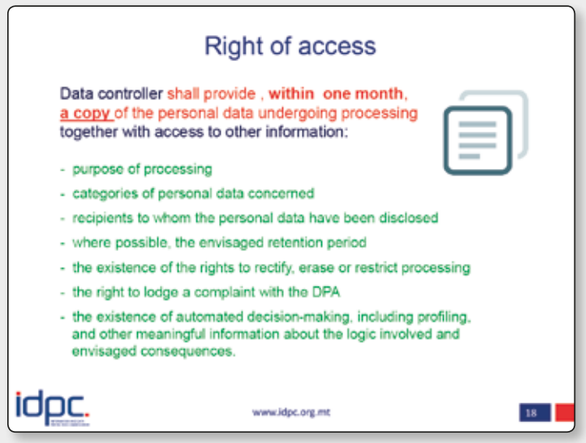

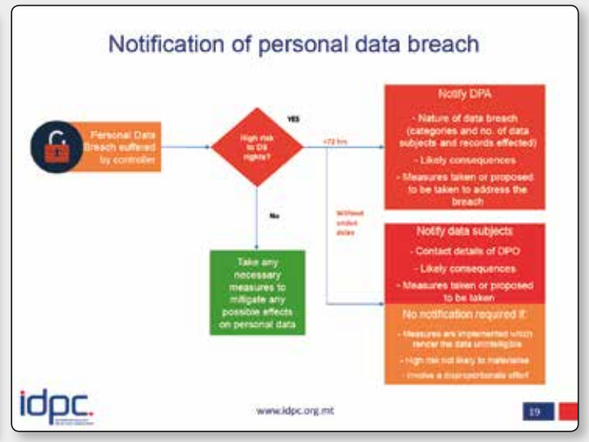

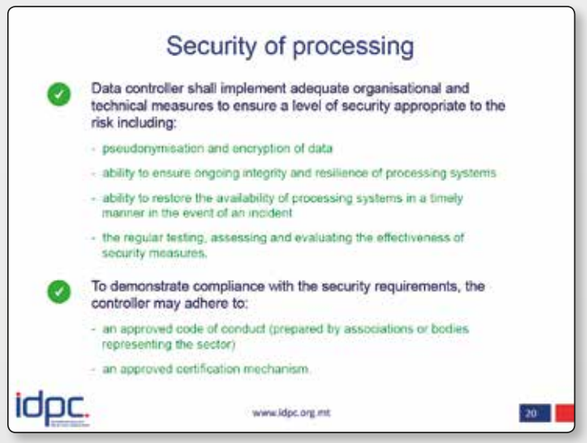

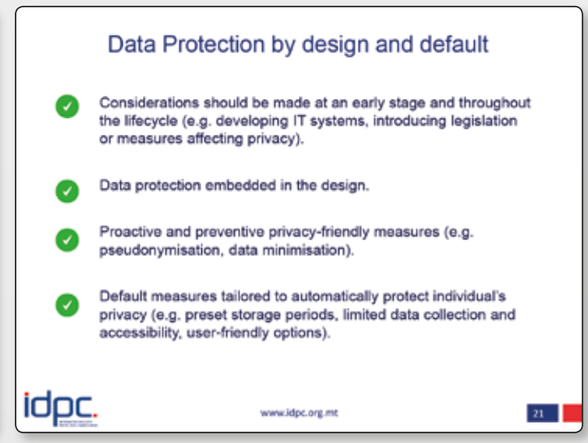

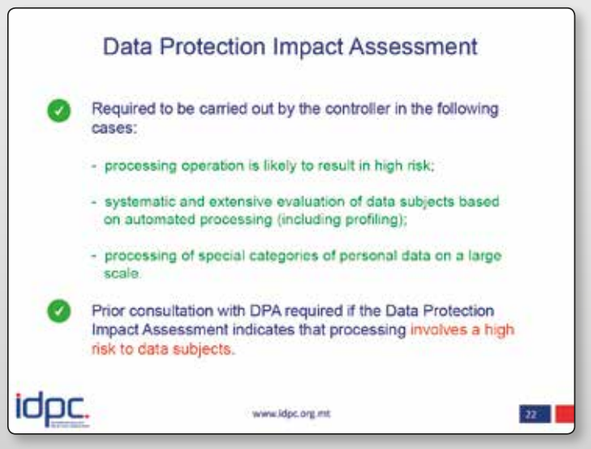

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AN OVERVIEW OF GDPR

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Data Protection Officer

- Position and Tasks of DPO:
  - staff member or engaged on service contract
  - should be able to work independently
  - involvement in data protection matters
  - informing and advising controller/ processor;
  - monitoring compliance;
  - providing advice and monitoring DP Impact Assessment;
  - cooperate with the DPA;
  - act as contact point for data subjects and DPAs.
- Controller or processor shall publish contact details of DPO and communicate them to DPA.

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Direct Marketing

- OPT-OUT

Promotional messages sent by conventional means (post or telephone) – *Recital 47 GDPR Processing of personal data for marketing purposes may be regarded as carried out for the legitimate interest.*

- OPT-IN

Direct marketing messages sent by electronic means (email, SMS, fax, automated calling machine)

Exception - Soft opt-in (opt-out) when data is collected in the context of a sale of a product or service and is used to direct market the organisation's similar products or services. Recipient shall be given the opportunity to object on each message - *Article 13 of the ePrivacy Directive*

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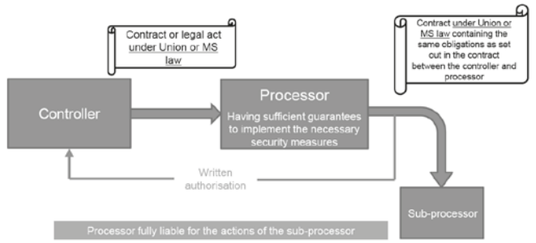
Controller – Processor relationship



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One-Stop-Shop

- A company with several subsidiaries in other MS may choose to deal with the DPA in the MS of its main establishment - "*...the place of its central administration in the Union...*".
- This principle intends to establish mechanisms to create consistency in the application of data protection across the EU.
- Co-decision making process is triggered in cross-border complaints:
  - Lead Supervisory Authority - cooperates with other concerned supervisory authorities for the purpose of exchanging the necessary information (Mutual assistance or Joint operations);
  - draft decision taken by the LSA
  - one or more concerned SAs expresses a **relevant and reasoned objection**
  - where the LSA decides not to follow such objection, it shall refer the case to the EDPB for a **binding opinion**.

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Take-away messages

MESSAGE 1

Ensure to legitimise the processing on the strength of the proper legal basis.

MESSAGE 2

Consent obtained under the present legal framework shall continue to be valid to the extent that it is in line with the conditions of the GDPR.

MESSAGE 3

Consider appointing a Data Protection Officer even when not legally required.

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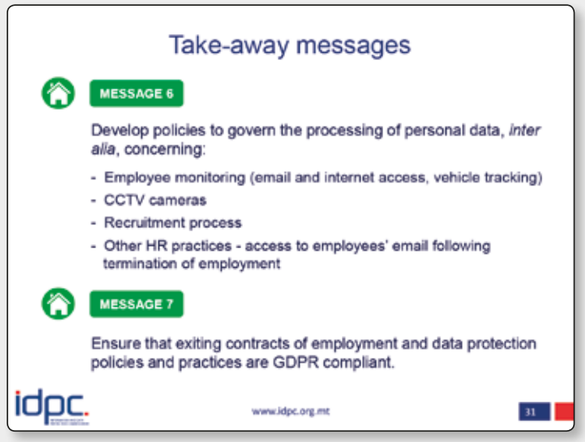
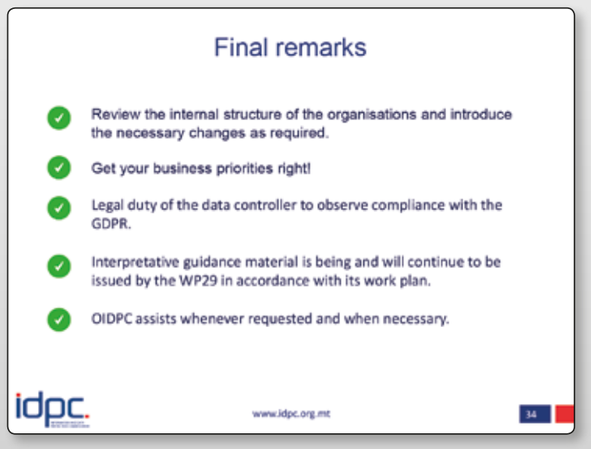
Continues on page 19.

AN OVERVIEW OF GDPR

Continues from page 16.

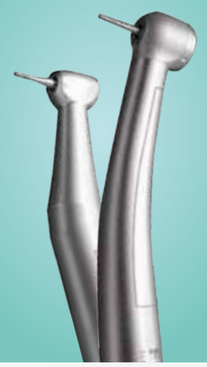




MIND BLOWING

OFFERS

FONA Handpieces



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SURATEK

THE DENTAL ASSOCIATION POSTGRADUATE DENTAL ECUCATION COURSE IN LIECHTENSTEIN 20–23 MARCH 2018

Between the 20th and the 23rd of March 2018 the Dental Association of Malta organised a four day intensive educational programme at the International Centre for Dental Education at Ivoclar Vivadent AG in Schaan Liechtenstein.

The group was led by Dr David Vella (President), Dr Adam Bartolo (Vice President), and Dr David Muscat (Secretary, Public Relations Officer and Editor of The Maltese Dental Journal).

The group was also joined by representatives from Bart Enterprises namely Mr Etienne Barthet, Ms Souha Benslama as well as Mr Yerasimos Tsepas from Ivoclar Vivadent. Dr Noel Manche (Treasurer) was responsible for all the organisation of the event behind the scenes.

The course was run by Dr Tatiana Repetto-Bauckhage, manager of Clinical Global Education at Ivoclar Vivadent.

The course dealt with the latest luting techniques for ceramic materials, a workshop of latest luting techniques and an overview of professional care and implant abutment solutions, the latest direct resin restorations and bonding procedures and natural anterior aesthetics.

Dr Holger Glexner took the group for a day of hands on preparation on ceramic veneers, inlays, onlays and crowns.

Dr Frank Zimmerling lectured the group on the Biofunctional Prosthetic system.

The Dental Association of Malta is proud to promote Continuing Professional Education and excellence in dentistry.

Top row: Dr Clifford Camilleri, Dr Mario Sant, Dr Adam Bartolo, Dr Andrew Vella, Dr David Vella, Dr Etienne Cassar, Dr Mario Camilleri, Mr Etienne Barthet and Dr Edward Fenech

Bottom row: Dr Tatiana Repetto-Bauckage, Dr David Muscat, Dr Chiara Brincat, Dr Chantelle Abela, Dr Christine Micallef, Dr Daphne Rizzo, Dr Natasha Zarb, Dr Clementine Dalli, Dr Corinne Bartolo and Mr Yerasimos Tsepas

THE IVOCLAR VIVADENT COURSE IN LEICHTENSTEIN 20–23 MARCH 2018

By Dr David Muscat

If you have ever wondered why the Swiss are known for their precision, then you should attend an Ivoclar Vivadent course at the International Centre for Dental Education in Schaan, Liechtenstein. Sixteen Dental Association members attended.

THE SALIENT POINTS

1. Never use phosphoric acid with Zirconia

2. HF causes scar tissue and bone damage. There is a delayed pain perception. This is a very strong contact poison and is absorbed by the skin .Nowadays with pure glass ceramics you can use etch and prime. Agitate the monobond for 20 seconds, allow to react for 40 seconds, rinse and dry for 10 seconds. The ceramic conditioner cleans, etches and activates the surface. The result is a strong chemical bond. Use monobond Plus for Oxide ceramics.

3. Variolink Esthetic has 5 colours and try in pastes. Ivocerm has 100 per cent amine free composition,excellent shade stability and no visible shrinkage.

4. MULTILINK AUTOMIX-use a multilink primer only as this is a closed system.

5. SPEEDCEM PLUS-this is self cure/ dual cure. It has a high radiopacity. This is good for implants as it is easy to see the material.

6. Fluroprotection S- this is used in between bleaching.

7. CERVITEC F- used for sensitive teeth,where there is a high carious risk. It kills bacteria, stops bleeding after provisionals. Apply to margins.

8. When using IPS e max you should have the Natural Die shade guide- this contains 9 shades. There are three new shades for brighter and non vital teeth. One should have a shade guide to go with the colour of the prepared dentine.

9. With a metal post one needs to use a high opacity e max. What the technician is doing is relevant due to the different protocols. There are two different luting materials –one with self cure and one with light cure.

10. Veneers on canines and premolars are prepared with a watch glass finish on the buccal aspect.

Continues on page 24.

THE IVOCLAR VIVADENT COURSE IN LEICHTENSTEIN 20–23 MARCH 2018

Continues from page 23.

11. Veneers on incisors are prepared with a shoulder onto the palatal aspect over the incisal edge and this is continuous all the way round. If you have a class11 you need to angle the preparation slightly on the incisal edge areas. Rounded margins and edges please.

12. Inlays and crown preparations for ceramics must have no bevels. No thin areas which are prone to fracture.

13. Dentists in Germany still use Harvard Zinc phosphate cement for luting bonded crowns.

14. Speedcem Plus and Variolink Esthetic DC are enough to cover luting of veneers and crowns. Speedcem Plus can be used for whole crowns of monolithic zirconium. Multilink Automix can be used for minimal prep bridges.

15. Speedcem Plus is used if preparation is retentive.

16. With multilink primer A and B there is NO NEED to polymerise as it is self polymerising.

17. Glass ceramic needs to be pre conditioned but if you have Zirconia you do not need to etch and prime- you just clean it with IVOCLEAN.

DR HOLGER GLEXNER – PREPARATION GUIDELINES

Smooth lines are very important in preparation. The more curves, the more problems. Round off sharp lines. It is impossible to create sharp lines with CADCAM. One needs to open sharp lines and cut deeper.

One needs to pass between the teeth with an explorer and extend the margin more to the outside. A bevel is a failure for porcelain. One needs a straight butt joint. Any tooth loss over 30% is an indication for a ceramic inlay. A long crown affords more stability and a short crown gives more problems.
A veneer is classified as a 'partial anterior crown.' You need at least 1mm diameter at the tip.

It is important to preserve the contacts when doing veneers. Use composite temporaries and use a carbide bur to remove composite temporaries.

When cementing six upper anterior veneers you can first cement the upper centrals, then the canines and then the laterals.

The canine veneer is difficult and best use a watch glass preparation on the buccal.

DR TATIANA – TIPS

Enamel is iridescent. It is acting as a prismatic filter reflecting the blue proportion of visible light ,transmitting the orange-red proportion. A wave bevel is used for class 4 preparations and the bur is moved from left to right, always with rounded edges. This way y0u do not see the line where the filling meets the tooth.

Adhese provides 192 applications per 2 mls. Empress Direct- 32 colours anterior and posterior.

BULKFILL has a self levelling effect. Tetric Evo Flow can be used for class V. Bluephase Light provides continuous cooling.

You can also restore class 2s by first building up a marginal ridge, then build up the two sides of the dentine and create a fissure and then use Tetric Evoceram on the top.

PROFESSIONAL INDEMNITY COVER **IS NOT ENOUGH!**

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We would like this article to be a simple eye opener to consider safeguarding, your health, your livelihood and also the standard of living of your dependants, in your absence.

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- **Health Insurance** – Covering private healthcare in Malta or abroad.
- **Personal Accident / Career Ending** – Protection plus limited income protection.

Everyone has a different attitude towards risk. Can we afford not to at least consider that there is always the possibility of adverse matters happening?

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THE CLASS II RESTORATION: WORKING SMARTER

Course held on 4th April 2018 by Bart Enterprises Ltd in conjunction with the University of Malta and Dentsply Sirona
Lecturer: Dr Adrienne Busuttil BChD, MSc AGDP(London)
Appraisal by Dr David Muscat

This was a half day course, intended for general dental practitioners, where it was discussed how the notoriously negative aspects of composite when used for Class II restorations can be minimised with:

1. Appropriate case selection.
2. New materials, equipment and techniques.
3. Meticulous operative technique with accuracy and precision in every step.

With respect to materials, Dr Busuttil spoke about the adhesive and the resin composite. These two materials are very important as they provide the seal between the restorative material and the tooth. As Dr Edwina Kidd once said 'the seal is the deal' and in order to ensure a good seal at the tooth-composite interface with no gap formation one has to focus on:

- Good adhesion.
- Techniques that will help to reduce the overall volumetric shrinkage and shrinkage stresses associated with composites.

In light of this, three main materials were presented and discussed in the first part of the course: Prime&Bond Universal, Ceram.x sphereTEC, SDR.

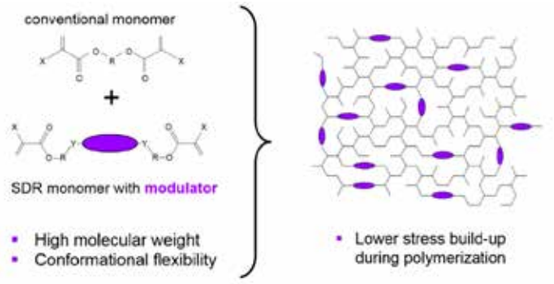
PRIME&BOND UNIVERSAL
The latest guidelines for bonding to enamel and dentine were discussed and it was concluded that selective enamel etching is most indicated for Class II composite restorations.

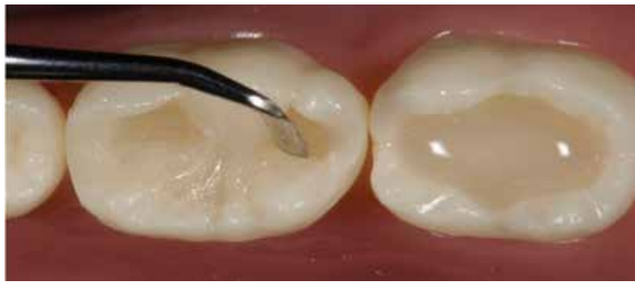
Prime&Bond Universal is an 8th generation adhesive that can be used with all etching methods. Its main beneficial features were presented in detail in an appealing and easy to understand way with very useful videos including:

- The strong bond resulting from the PENTA molceule.
- Active moisture control giving reliable hybrid layer formation even if dentine does not have the ideal wetness/dryness.
- Active spreading for even coverage of the cavity.
- Active tubule penetration which enables the adhesive to penetrate over-dried dentine.
- Low viscosity and low film thickness for greater ease of application and no adhesive pooling.
- No HEMA, no TGDMA, no bisphenol.
- 30 minutes storage in closed CliXdish.
- Flip Top Cap Bottle.

CERAM.X SPHERETEC BY DENTSPLY
This is a nanoceramic composite material with SphereTEC technology that allows for optimal filler composition. This technology was explained clearly and it was shown how this allows for optimal handling of the material including easy extrusion, less sticking to instruments, slump resistance, very precise sculpting, good adapatation to cavity walls, and easy polishing. This material comes in five cloud shades (A1-A4) of moderate translucency allowing restoration of all teeth within the shade range of the VITA classical shade system, based on chameleon effect.

SDR (SMART DENTINE REPLACEMENT)
This is a low stress composite owing to a high molecular weight resin monomer and a polymerisation modulator in its composition. It provides an approximate 20% reduction in volumetric shrinkage and almost an 80% reduction in polymerization stress compared to conventional methacrylate resins.





The material can be used in bulk in increments up to 4mm, even in high C-factor cavities. The lecturer showed how excellent adaptation and seal can be achieved with this material due to its flowable consistency and self-levelling property. SDR should only be used to replace dentine and must be capped with standard composite. The scientific evidence regarding the reliability of using this material routinely was discussed.

The next part of the course focused on optimising restoration outcome with meticulous operative technique. All the clinical steps involved in the placement of a Class II restoration were revisited including:

STEP 1: Occlusal Record.

STEP 2: Cavity preparation and design with details on minimally invasive approaches, bevelling of margins, and the latest updates with respect to placing/not placing liners and bases.

STEP 3: Shade Selection.

STEP 4: Isolation and the use of rubber dam.

STEP 5: Matricing and tooth separation – the most important determinant of tight contacts and natural proximal contour. Dr Busuttil highlighted how contemporary matricing and tooth separation involves the use of sectional matrices and separation rings, such as the Palodent V3 system by Dentsply available during this course, in preference to the traditional circumferential matrix band. Sectional matricing has been scientifically proven to give the best proximal contact areas, by allowing for more anatomical, tighter and stronger contacts, stronger marginal ridges and less overhangs. The components of the Palodent V3 System were explained well and the benefits of using this system in normal everyday practice were outlined.

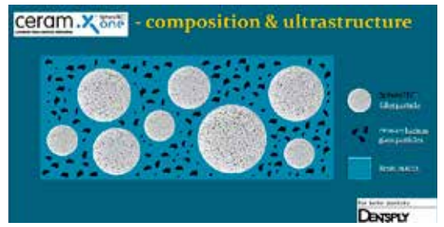
STEP 6: Adhesion with more detail on the clinical protocol for using an 8th generation adhesive with the selective etching technique.

STEP 7: Composite placement with an approach whereby the gingival floor – the most vulnerable interface of a Class II restoration in terms of leakage and recurrent decay – is restored first using SDR as open sandwich. The scientific rationale of this technique in preference to using a regular flowable composite was presented, together with valuable practical tips on the clinical handling of SDR. SDR is also used on the pulpal floor. Dr Busuttil showed how a single increment of Ceram.x SphereTEC is used to build the proximal wall and marginal ridge of the box and essentially convert the Class II into a Class I cavity. Horizontal layering is continued with SDR, in 4mm increments, to replace dentine up to the occlusal ADJ. The last 2mm are restored with Ceram.x SphereTEC. The lecturer showed how the occlusal anatomy can be recreated very precisely using oblique layering. Emphasis was made on the importance of maximising the quality of cure and how this can be achieved. The SmartLite Focus pen-style LED curing light by Dentsply was provided during this course – this produces a collimated light beam to deliver light energy uniformly down to even 8mm, with low heat build-up.

STEP 8: Finishing and polishing, the importance of which should not be underestimated in ensuring the longevity of a Class II composite restoration. Details on how to achieve a high level of finishing and polishing were shown, including the use of standard diamond composite finishing burs, and Enhance, PoGo Polishers, PrismaGloss and PrismaGloss Extra fine, all by Dentsply Sirona.

The last part of the course included a hands-on session in which participants were provided with a training kit that included all the materials and equipment discussed, and were given the chance to try all the techniques that were presented in the lectures. The time dedicated to the practical aspect could have been a bit longer but Dr. Busuttil was there to assist all the participants achieve a high level of confidence in using the materials. What would have also benefitted the course would have been maybe a second chance to do a class 2 restoration and the ability of participants to compare and contrast their work.

Even after thirty two years of general practice I feel that it is important for general practitioners to get out of their clinics and attend such courses and stay abreast of new techniques and materials. Of course what practitioners look for are the hands on aspects of courses which will greatly benefit their practice with the scientific reasons as to why techniques work well if you follow the rules and instructions.



THE FAR REACHING EFFECTS OF AN UPPER CERVICAL FRACTURE

Dr C.E. Corney MB.BS, DMRD, FRCR
Medical Practitioner and Researcher

History A man in his 70s tripped and fell flat on the floor. He was suddenly aware of an inability to lift his head on the spine, and also he complained of weakness in both arms. There was no loss of consciousness. Blood Pressure was normal at 90/60. The above weakness was confirmed on examination. Legs and plantar reflexes were normal. The head was immobilised in a brace as a neck fracture was suspect. Radiology revealed a 6mm displaced fracture of C2 odontoid peg. Successful screw fixation of this fracture and displacement was performed. Brain Scan was normal.

Progress Other symptoms [listed below] appeared at varying intervals from 5 minutes to 5 weeks after the accident. Subsequent radiology showed healing and maintenance of good reduction of the fracture,with steady improvement of the above arm, wrist and finger symptoms. However new symptoms developed:

1. Mild Choking
2. Bilateral Shoulder, Arm, Wrist & Finger Weakness, Tingling & Numbness
3. Raynaud's Phenomonen at Room Temperature
4. Excessive Tears
5. Gravitational Oedema of Legs, Ankles & Feet
6. Over Active Bladder & Nocturia
7. Orthostatic Hypotension & Fainting
8. Watery Motions, Abdominal Distension and Excessive Wind due to Non Obstructive Megacolon radiologically

Comment Prior to this accident the patient had never suffered such symptoms in the past [apart from Raynaud's phenomonen- see below]. Their disparate nature suggested neurological malfunction. The routine neurological examination [i.e.Central Nervous and Peripheral Nervous Systems] was normal apart from the weakness in both upper limbs, so damage to the Autonomic Nervous System [ANS] had to be considered.

Anatomy & Function of ANS The ANS is another nervous system designed for unconscious automatic regulation of blood flow and control of the function of the thoracic and abdominal viscera, eyes, nasal mucosa, salivary and lachyrimal glands, skin and smooth muscle. It starts at the hypothalamus where it divides into two distinct systems - namely the PARASYMPATHETIC and the SYMPATHETIC - both of which descend into the medulla-upper cervical spinal cord where there are connections with feeder branches into the centres of involuntary swallowing, blood pressure, heart rate, oxygen and carbon dioxide control. The ANS has also feeders from the limbic system,particularly the amygdala, thalamus and cerebral cortex which exert some external control on it.

Some of the parasympathetic nerves exit the brain stem via the III,VII, IX, X cranial nerves to feed the iris and ciliary muscles of the eyes, mucosa of nasal and lachrymal glands. Part of the IX, X, C1 and C2 nerves combine to feed the involuntary swallowing centre. The remainder of the X nerve [vagus] and parasympathetic components travel inferiorly through the chest feeding the heart and lungs whilst others descend through the diaphragm to feed the liver, spleen, gallbladder, pancreas and gastrointestinal tract to join up with another loop of vagus which exits the spine in the sacral region to feed the the genitourinary system. 75% of all parasympathetic activity is in the parasympathetic part of the vagus.

The sympathetic nerves exit the spinal cord segmentally and bilaterally in the spinal nerves from T1 to L2 to form a bilateral chain of sympathetc nerves running from upper cervical to upper lumbar regions [including Co1] in close proximity to the spine anteriorly. The spinal nerves also innervate the skin blood vessels, sweat glands and erector pili muscles. Nerves from these chains feed the liver,spleen,gallbladder, pancreas, adrenal glands, kidneys,small and large bowel. Separate feeds to genital system and bladder are present. Although the first sympathetic spinal exit is at T1, these chains also run upwards in close proximity to anterior margin of the cervical vertebral bodies to join the III, VII, IX, X cranial nerves to feed the iris and ciliary muscles of the eyes, mucosa of nasal, lachcrymal and salivary glands..

It will be noted that there is a double [parasympathetic and sympathetic] innervation for all the thoracic and abdominal viscera, iris and ciliary muscle of the eyes, mucosa of the nasal, lachcrymal and salivary glands, and skin. The double innervation of the gastrointestinal tract, pancreas and gallbladder forms what is known as the enteric nervous system which can function by itself without the presence of a spinal cord or brain. The parasympathetic system uses acetylcholine as a neurotransmitter whilst the sympathetic uses predominantly noradrenaline and adrenaline with a little acetylcholine at some sites, whilst the enteric system uses all of the above plus a minority of some other neurotransmitters.

Abnormal ANS function [Autonomic Neuropathy] Whilst the anatomy and function of the ANS is seemingly complex, the symptoms and signs of its malfunction can be deduced and explained by consideration of the knowledge of the neurotransmitter type and the innervation of the various structures as explained above. These are summarised in the table on the right.

STRUCTURE	PARASYMPATHETIC STIMULATION	SYMPATHETIC STIMULATION
iris, ciliary muscle	pupil constriction	pupil dilation
lachcrymal glands	stimulates tears	inhibits tears
salivary glands	stimulates salivation	inhibits salivation
nasal mucosa	mucus increased	mucus decreased
heart & baroreceptor	rate & BP decreased	rate & BP increased
bronchi	constricts	relaxes
skin blood vessels	constricts	relaxes
sweat glands		activates
gastrointestinal tract	peristalsis, wind increased digestive juices increased	peristalsis, wind decreased digestive juices decreased
liver		releases sugar from liver glycogen
kidneys	urine volume increased	urine volume decreased
adrenal medulla		adrenaline & noradrenaline secreted
bladder	wall contracted, sphincter relaxed	wall relaxed, sphincter closed
genitals	stimulated	inhibited
male ejaculation		stimulated
rectum	stimulates emptying	
summary	'Rest & Digest' response	'Fright, Flight or Fight' response

DISCUSSION OF PATIENT'S CLINICAL FEATURES

1. Mild Choking of fluids was due to poor lift-up of the hyoid during swallowing from C1, C2 paralysis.
2. Shoulder, arm,wrist and finger weakness, tingling and numbness were due to presumed pressure on C1 to C8 nerve roots.
3. Raynaud's Phenomonen previously seen only at near freezing temperatures pre-accident now appeared when room temperature fell below 19C indicating loss of upper cervical sympathetic control on finger artery muscles.
4. Excessive Tears from the Lachrymal glands, excessive salivation from the Salivary glands and excessive production of Nasal mucus indicated sympathetic loss of C1, C2 with consequent parasympathetic dominance.
5. Oedema of Legs, Ankles and Feet occurred in the erect position but disappeared in the supine position which indicated poor capillary tone due to loss of sympathetic control.
6. Overactive Bladder [intermittent detrusor instability causing occasional slight leakage] and Nocturia were due to parasympathetic dominance due to loss of sympathetic conrtrol, particularly at night when the kidneys were incorrectly excreting more urine than during daytime. Other causes of nocturia such as diabetes mellitus and prostatic obstruction were excluded clinically.
7. Orthostatic Hypotension causing fainting attacks [blood pressure dipped to 70/50] when changing from supine or seated position to the erect position due to a temporary drop in blood pressure not accompanied by a temporary increase in cardiac output. This in turn was due to damage of the sympathetic chain at the C1,C2 level in close relationship with the fracture at that site interfering with the sympathetic nerve to the baroreceptor in the neck. Orthostatic hypotension has been frequently noted in patients taking anti-sympathetic drugs to treat hypertension. This patient was not taking any drugs however.
8. Watery Motions, Abdominal Distension and Excessive Wind accompanied by excessive peristalsis and digestive juices indicated excessive parasympathetic activity not counterbalanced by sympathetic activity because the part of the sympathetic system had been damaged by the cervical fracture. Radiology revealed a non obstructive megacolon due to intermittent paralysis of the enteric nerve plexus.

LIKELY DIAGNOSIS

The symptoms and signs described above point to some loss of sympathetic control with/without unopposed parasympathetic dominance i.e. an autonomic neuropathy. Also the distinctive C1 and C2 somatic nerves weakness causing choking [failure of hyoid lift up] suggests a localised cause of this problem i.e. the injury at C1, C2, but all causes have to be considered.

CAUSES OF AUTONOMIC NEUROPATHY

[a] Temporary Malfunction of ANS is due to a sudden 'fright reaction'. This is where the sensory cortex is bypassed by unconscious neurological impulses passing more quickly through the limbic system of sensory thalamus and amygdala to activate a very fast motor response for either 'flight' or 'fight'. For a number of potentially life saving milliseconds the patient is unaware of the danger because the impulses have yet to reach the cortex. Once the impulses do reach the cortex then a conscious choice is made to decide if the danger is real or false. If false the cortex will tell the limbic respnse to 'stand down'. If there is a real danger the limbic response stimulates the adrenal glands to secrete adrenaline and noradrenaline which stimulate the sympathetic system and inhibit the parasympathetic system. So the patient is pale, with dry mouth,a racing heart and high blood pressure [see above table for further clinical features]. Sometimes the parasympathetc can also be stimulated producing increased peristalsis and wind.

[b] Multiple Patchy Involvement of ANS--Diabetes Mellitus/Amyloid Disease/Autoimmune Disease/ Multiple Sclerosis/Parkinson's Disease/ HIV-AIDS [mixed sympathetic & parasympathetic effects]

[c] Generalised Invovement of ANS- -Drugs-Cocaine--Amphetamine [sympathetic stimulation]. Drug Withdrawal--Alcohol/Opiates/ Tranquillizers [sympathetic stimulation]

[d] Single Lesion in ANS--Space Occupying Lesion--Tumour/Arterial Venous Malformation/Haematoma--Nerve Root Avulsion

DIAGNOSIS

Whilst the common belief is that the sympathetic and parasympathetic systems are in opposition,[i.e.when one is low, the other is high or dominant] this is not always so, as the above causes indicate. So both systems should be regarded as complimentary to each other rather than opposites. The history in reaching the diagnosis is important. Cause [b] can be ruled out as it is permanent and progressive. Drug and fright-flight episodes can also be excluded clinically. Cause [d] can be excluded because of permanent effects - apart from haematoma.which usually resolves. Over a course of months this patient's neurological clinical features steadily improved. This suggested a traumatic haematoma in the linings of the spinal cord at C1,C2.

The commonest type of traumatic haematoma is a subdural haematoma of the cord in upper cervical region [pressing against the upper cervical nerve roots] which over time resolves completely without neurological deficit. No surgical relief is necessary.This type of haematoma is the result of the sudden flexing of the cord and its linings without intrinsic damage to the cord itself [which would produce a quadraplegia].

Thus it can be seen that generally the patient's symptoms can well present as oro-lachrymal-salivary-facio-maxillary problem to the dentist, ENT or facio-maxillary specialist, or dysphagia to the chest surgeon, or fainting attacks to the cardiologist or abdominal symptoms to the surgeon, or paralysis to the neurologist. This myriad of presentations can make the diagnosis difficult when there is no history of trauma.

PRACTICAL PERIO:
SMILE FOR HEALTH 2017

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Specialist in Periodontics (UK)

PRACTICAL PERIO

Smile for Health 2017

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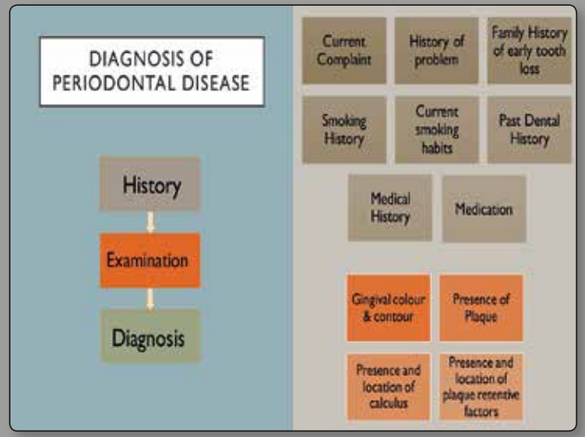
BDS, MSc MClinDent (perio), MFDS RCSEng, MRD RCSEd.

Specialist in Periodontics (UK)

INTRODUCTION

- Periodontitis is the 6th most prevalent disease in the World
- Periodontitis is a chronic inflammatory disease of bacterial aetiology that affects the supporting tissues around the teeth.

DIAGNOSIS OF PERIODONTAL DISEASE



IDENTIFYING RISK FACTORS

	Risk Factors	
	Modifiable Factors	**Non-Modifiable Factors**
Local Factors	Plaque and Calculus Dental appliances Poor restorations Malpositioned teeth	Anatomical factors
Systemic Factors	Smoking Diabetes Poor diet Certain medications Stress Emerging evidence: Nutrition, alcohol & obesity	Socioeconomic status Genetics Age Pregnancy

WHY TREAT DISEASE?

- Can negatively impact a patient's quality of life
- Links to systemic health
- Treatment works
- Negligence claims
- Profitable

EPIDEMIOLOGY

2009 UK Adult Dental Health Survey

- 37% of the adult population suffer from moderate chronic periodontitis (with 4-6mm pocketing)
- 8% of the population suffer from severe periodontitis (with pocketing exceeding 6mm).

PERIODONTAL EXAMINATION

- Basic periodontal examination
- Full periodontal examination

BASIC PERIODONTAL EXAMINATION

upper right 17-14	upper anterior 13-23	upper left 24-27
lower right 47-44	lower anterior 43-33	lower left 34-37

- All teeth in each sextant are examined
  - with the exception of 3rd molars unless 1st and/or 2nd molars are missing
- Minimum of TWO teeth per sextant

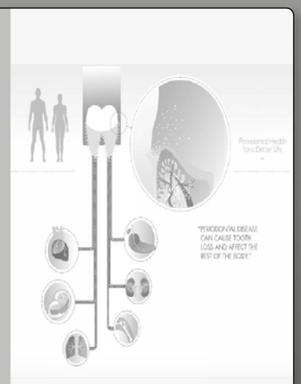
SYSTEMIC DISEASE & PERIODONTAL HEALTH

Establishes Associations

- Cardiovascular Disease
- Diabetes
- Adverse pregnancy outcomes

Emerging Associations

- Rheumatoid Arthritis
- Chronic Kidney Disease
- Cognitive decline
- Osteoporosis



TREATMENT WORKS!

- Trombelli et al. J Clin Periodontol 2015.
- Systematic review long-term SPT in the prevention of periodontitis progression.
  - 19 studies included
- In general, studies reported no to low incidence of tooth loss during follow-up.

HOW TO RECORD BPE

- All new patients should have a BPE recorded
- Score is recorded for each sextant
- If a furcation is detected both the score and the * should be recorded
  - e.g. 3* =probing depth 3.5-5.5 mm plus a furcation involvement in that sextant

BPE SCORES

0	Pockets <3.5mm, no calculus/overhangs, no bleeding on probing (black band entirely visible)
1	Pockets <3.5mm, no calculus/overhangs, **bleeding** on probing (black band entirely visible)
2	Pockets <3.5mm, supra or subgingival **calculus/overhangs** (black band entirely visible)
3	Probing depth 3.5-5.5mm (**black band partially visible**, indicating shallow pockets of 4-5 mm)
4	Probing depth >5.5mm (**black band disappears**, indicating a deep pocket of 6 mm or more)
*	**Furcation** involvement

Continues on page 34.

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Continues from page 33.

HOW TO USE BPE- NEW RECOMMENDATIONS

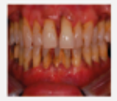
- For patients with BPE scores 0,1 or 2 the BPE should be recorded at every routine examination
- For patients with BPE codes of 3 or 4, more detailed periodontal charting is required
- **Code 3:**
  - Initial cause related therapy, post treatment record a 6-point pocket chart (6 PPC)min that sextant only
- **Code 4:**
  - If there is a Code 4 in any sextant then record a comprehensive periodontal examination

HOW TO USE BPE- NEW RECOMMENDATIONS

- Radiographs should be taken for all Code 3 and Code 4 sextants.
  - Radiograph must show crestal bone levels
  - periapical view is regarded as the gold standard

GINGIVITIS OR PERIODONTITIS?

- Gingivitis
  - affects gingiva only
  - No loss of attachment
- Periodontitis
  - affects all structures of periodontium
  - Loss of attachment
- Localised or generalised?



CHRONIC OR AGGRESSIVE PERIODONTITIS

CHRONIC

- Abundant plaque deposits,
- Calculus and other local factors
- Smoking
- Will apply even if the patient is relatively young

AGGRESSIVE

- Rapid progression (e.g. by serial radiographs)
- Disease in a well looked after mouth
- Will apply even if the patient is older than the old classification's "Early Onset" group.

BPE SHOULD NOT BE USED :

- Around implants
  - 4 or 6-point pocket charting should be used
- To monitor the response to periodontal therapy
  - does not provide information about how sites within a sextant respond
  - 6-point pocket chart should be recorded pre and post-treatment and then annually

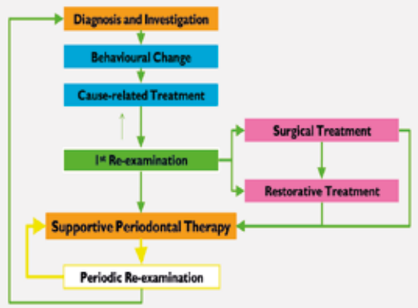
INTERPRETATION OF BPE SCORES

Codes	Treatment guidance	Follow up
1	Oral hygiene instruction (OHI)	BPE next check up appointment
2	OHI, removal of plaque retentive factors, including all supra- and subgingival calculus	BPE next check up appointment
3	As for 2 and RSD as required	Periodontal charting of sextant scoring 3, after initial therapy
4	OHI, RSD. Assess the need for more complex treatment; referral to a specialist may be indicated	Full periodontal charting before and after treatment
*	OHI, RSD. Assess the need for more complex treatment; referral to a specialist may be indicated.	Full periodontal charting before and after treatment

PROGNOSIS

- At the early stages of treatment it is often impossible to make **definitive** decisions
- Prognosis is determined by the number of risk factors that can be reduced or eliminated
- Tooth by tooth prognostic allocation…..
  - Hopeless or irrational to treat
  - Guarded or questionable prognosis
  - Good prognosis following treatment

MANAGEMENT



MORE INFORMATION ON BPE

BSP guideline on BPE
http://www.bsperio.org.uk

PERIODONTAL DIAGNOSIS

Armitage et al 1999 (in current use)

I. Gingival Diseases

II. Chronic Periodontitis

III. Aggressive Periodontitis

IV. Periodontitis as a manifestation of systemic disease

V. Necrotising periodontal disease

VI. Abscesses of the periodontium

VII. Periodontitis associated with endodontic lesions

VIII. Developmental/acquired deformities and conditions.

6 MONTH "SCALINGS"

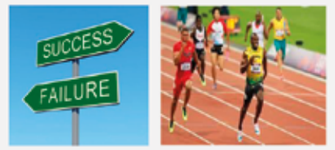
- Are possibly pointless without effective plaque control
  - For the healthy patient – OHI is more effective at preventing disease
  - For the diseased patient – treatment has to be properly directed and executed based on diagnosis and risk management


Principles in prevention of periodontal diseases

Consensus report of group 1 of the 11th European Workshop on Periodontology on effective prevention of periodontal and

BEHAVIORAL CHANGE

- Successfully treatment is **highly dependent** on the patients ability to **maintain good oral hygiene**



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Continues from page 35.

PLAQUE CONTROL

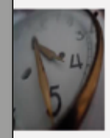
- Education & Motivation
  - Give the patient information about their disease and the proposed treatment
- High standard of self performed plaque control
  - No plaque, No disease (!)
- Personalised Oral hygiene instruction
  - Tooth Brushing
  - Interdental cleaning
  - Adjuncts

MANUAL VS. ELECTRIC TOOTHBRUSH


Efficacy of homecare regimens for mechanical plaque removal in managing gingivitis a meta review

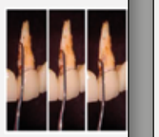
- With respect to gingivitis **power toothbrushes have a benefit over manual toothbrushes**.
- The greatest body of evidence was available for **oscillating–rotating brushes**.
- **…..powered toothbrushes provide a statistically significant benefit compared with manual toothbrushes** with regard to the reduction of plaque
- The greatest body of evidence was for **rotation oscillation brushes**


Cochrane Library
Powered versus manual toothbrushing for oral health



WHAT WORKS FOR NON-SURGICAL PERIODONTAL TREATMENT

- Get behavioural change right first
  - Don't let patient substitute mouthwash for ID brushes
- Need time - literature suggests 10 min/ tooth
- Effective local anaesthesia
- Being systematic
- Knowing your instrumentation well



POWERED INSTRUMENTS

- Ultrasonic Scalers (25-30 KHz)
  - Magnetorestrictive/Piezoelectric
- General scaling tips
- Perio tips thinner and longer
- Special curved tips for furcations

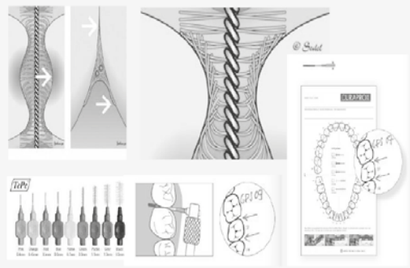
INTERDENTAL CLEANING

Conclusion:

- Evidence suggests that **inter-dental cleaning with IDBs** is the most effective method for inter-dental plaque removal.
- The majority of available studies fail to demonstrate that flossing is generally effective in plaque removal

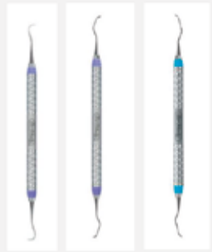

Efficacy of inter-dental mechanical plaque control in managing gingivitis – a meta-review

INTERDENTAL BRUSHES: CORRECT SIZE



MANUAL INSTRUMENTATION

- Buy quality instruments with large diameter handles
- Sickle scaler
  - H6/H7 Hygienist Scaler
- Universal Curettes
  - Columbia 2R/2L & 4R/4L
- Extra - Site specific curettes



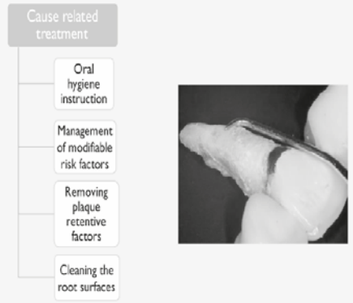
INSTRUMENT CARE

- Debridement efficiency is greatly diminished by the use of blunt or worn instruments
- Manual instruments
  - Sharpening
- Power instruments
  - Wear of tip/ inserts

SMOKING

- Most important modifiable risk factor
- Regular smokers **4 times** as likely as persons who had never smoked to have periodontitis
- Time and dose dependent
- Smoking cessation advice
  - Brief Advice
  - The 5 A's – Ask, Advise, Assess, Assist, Arrange
  - Referral to smoking cessation services

CAUSE RELATED TREATMENT



ASSESSING TREATMENT OUTCOMES

- Reassessment after 8 to 12 weeks of healing
- Complaints – sensitivity, soreness, black triangles
- Quit smoking?
- Keeping up the tooth cleaning?
- Examination
  - Plaque
  - Comprehensive periodontal examination

EXPECTED EFFECTS OF NON SURGICAL TREATMENT

Reduction in inflammation

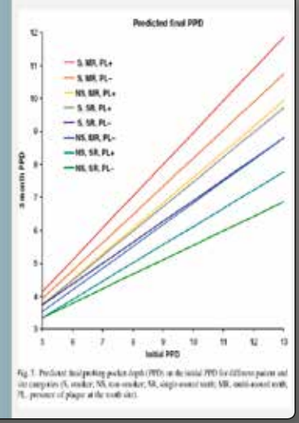
Pocket depth reduction

1mm for 5-6mm pockets

2.2mm in 7mm+ pockets

classic Badersten studies 1980's

Clinical attachment gain



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Continues from page 37.

WHAT NEXT? GOOD PLAQUE CONTROL (I.E. 20% OR LESS)

+ smooth roots + pockets have decreased to 5mm or less	• start maintenance/ supportive periodontal therapy
+ subgingival calculus	• further RSD then reassess
+ smooth roots + deep residual pockets	• Advise surgery • OFD, Resective, Regeneration

SUPPORTIVE PERIODONTAL THERAPY

- Long term follow up
- Studies show that patient compliance with periodontal maintenance appointments has a **profound influence on tooth retention** and **avoidance of disease recurrence**

PERIODONTAL RISK ASSESSMENT

Low risk	SPT interval of at least once a year was recommended.
Moderate risk Patients presenting with at least two risk factors in the moderate-risk category and at most one risk factor in the high-risk category were classified as displaying a moderate-risk profile	SPT recommended twice a year.
High-risk category	SPT recommended at intervals of 3–4 months per year

CONCLUSIONS

- Good management of periodontal disease starts with a detailed history & examination
- Explain to the patient their risk of periodontal disease and what treatment is required
  - Monitoring, OHI, non surgical treatment
- Behavioural changes including smoking cessation and improvement in plaque control MUST precede treatment

CONCLUSIONS

- Simple mechanical treatment with ultrasonic or hand instruments works well if done to a high standard
- If the patient fails to respond to treatment, including a failure to carry out adequate plaque control despite repeated oral hygiene instruction
  - make a note of this in the records, along with the explanations given to the patient regarding the consequences.

CONCLUSIONS

- If non surgical treatment is followed by correct re-evaluation, corrective (surgical) treatment and supportive periodontal therapy tooth loss is expected to be low
- Recognise the limits of your clinical skills and of how much time you can give each case

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