ISSUE
55
SEP15

The Dental Probe

The Maltese Dental Journal

Editorial

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DENTAL ASSOCIATION OF MALTA
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By Dr David Muscat

Dear colleagues,

Since the last issue these are the DAM events organised at time of writing.

The cover picture was kindly provided by artist Jacqueline Agius, mother of Dr Andrea Agius.

To contact the editor please use the following e mail address editor@dam.com.mt.

Best regards,

David

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

RECENT/PLANNED EVENTS

17 JUNE
Clay Pigeon shooting event

29 JULY
Sailing event

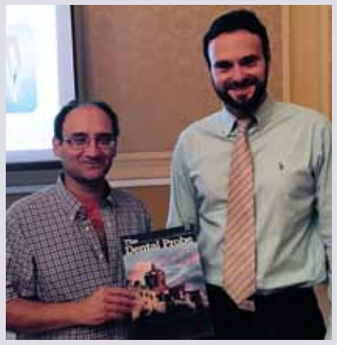
30 JULY
First Aid Course at Radisson

2 SEPTEMBER
Endodontics lecture by Dr Spyros Floratos at Palazzo Depiro sponsored by VJ Salomone/FKG Dentaire at Palazzo Depiro Mdina

11 SEPTEMBER
Full day Hands on Course with Professor Brian Millar at Hilton sponsored by Coltene – Bart Enterprises

OCTOBER
Lecture by Mr Alex Manche planned, sponsored by AM Mangion.

4 DECEMBER
Christmas Party at the Quarterdeck Bar, Portomaso Hilton



Dr David Muscat presents The Dental Probe to Dr Spyros Floratos, asst. Adjunct professor at dept Endodontics Univ Pennsylvania and affiliated to Univ. Athens, on Sept 2 at Palazzo Depiro Mdina on the occasion of the DAM lecture 'Enhancing Cleaning and Shaping Root Canals' and the launch of dental products of VJ Salomone.

THE DAM CLAY PIGEON SHOOTING EVENT

This took place at the Maghtab shooting range on Wednesday 17 June in the early evening. There were about 20 participants. The professionals were in a class of their own. From the non professionals the results were as follows:

First prize: *Dr. Andrew Vella*
Second prize: *Dr. Patrick Vassallo*
Third prize: *Dr. David Muscat.*

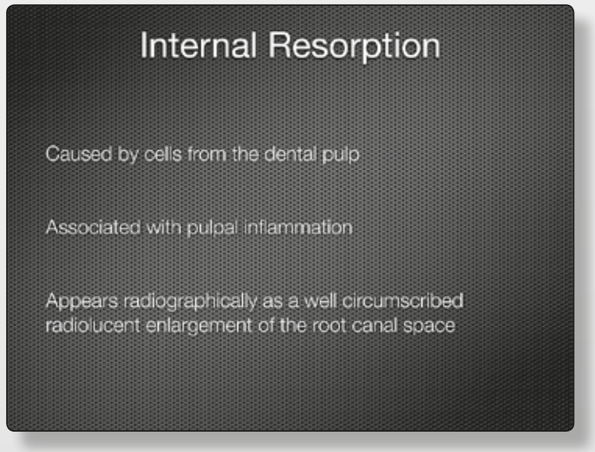
The prizes were presented by Dr Noel Manche who organised the event.

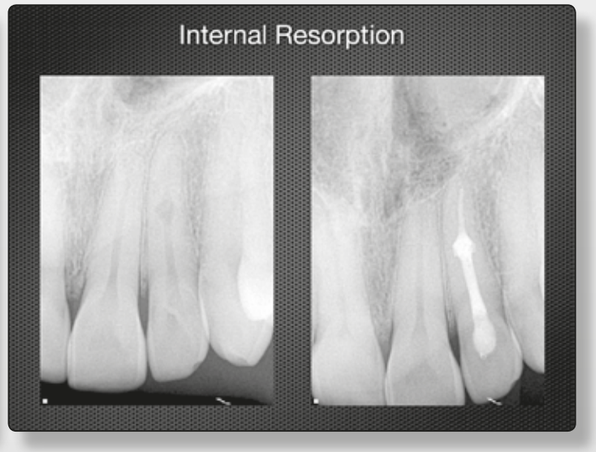
This has now become a yearly event on the DAM calendar.

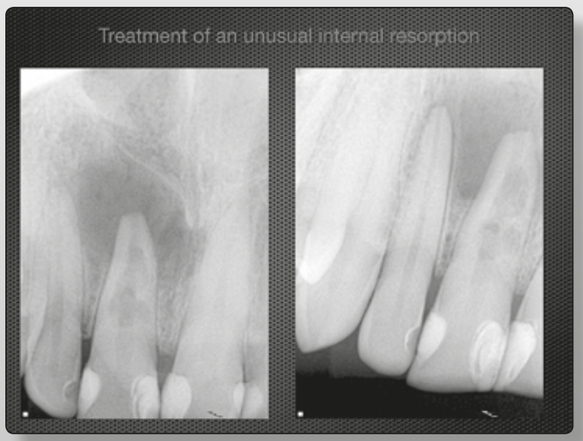
After the event the group descended upon Jade Garden in Paceville for a Chinese meal.

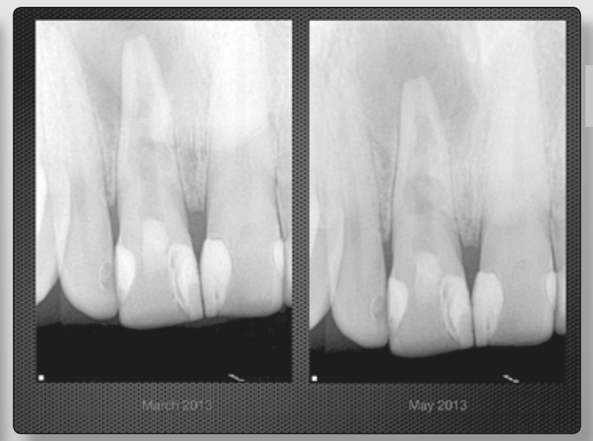
RESORPTIONS

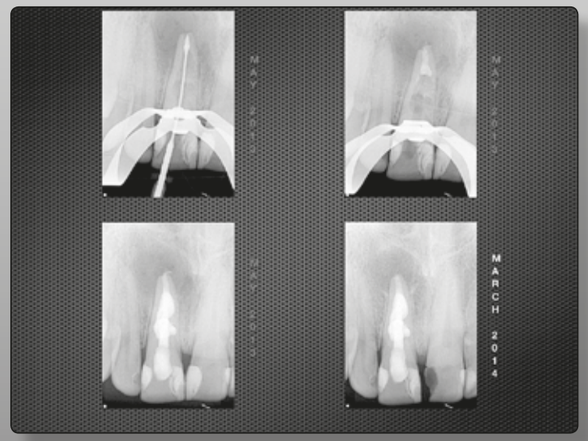
Daniel M Keir, DDS
Diplomate, American Board of Endodontics

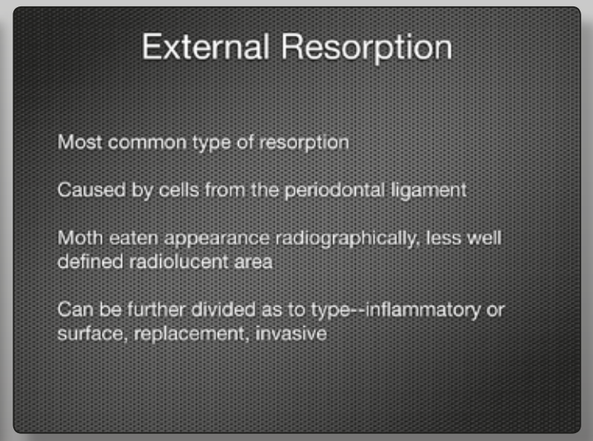












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THE DAM SAILING EVENT 2015

On Wednesday 29th July Dr Mark Diacono set sail on Zappa from Portomaso, Dr Patrick Vassallo on Allegra from Ta Xbiex, Dr Mario Cachia on Fernandes 11 from Msida and Dr Mario Sant on Timeout from Cottonera.

The four boats were each carrying around 8 dentists. We all met up at Marsamxett harbour and then sailed out several miles to be met by a pod of dolphins.

Zappa and Allegra dropped anchor at Spinola Bay where various fine wines, beers, cheeses and dips were enjoyed and everyone had a swim.

On board the Zappa there was a party atmosphere with Drs Klaus Vella Bardon playing his accordion, Ann Meli Attard and Gabrielle Cordina playing the guitar and the rest of the guests bursting into song. Dr David Vella also met us briefly at Spinola Bay on his rib.

After the sailing, most dentists met up at the Ta' Xbiex Waterpolo club for an excellent meal. A most enjoyable afternoon and evening.

The sailing event has now become a regular yearly Dental Association event and we would like to thank Mark, Patrick, Tonio and Mario for taking us on their boats.

Non-stick effect for efficient contouring

Ivoclar Vivadent has developed the innovative modelling instrument OptraSculpt® Pad in order to meet the demand for efficient processing of highly-esthetic composites.

Despite the excellent mechanical properties of composite materials, their contouring remains a very demanding task for dentists even today. Highly esthetic composites, in particular, sometimes demonstrate a very adhesive consistency due to their filler composition, and they are thus more difficult to shape.

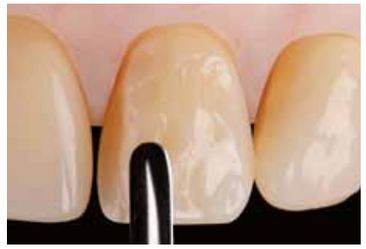
OptraSculpt® Pad is a contouring instrument with special foam pad attachments, which is designed for the efficient, non-stick forming and shaping of composites. It is especially suitable for the contouring of class III, IV and V restorations as well as of direct veneers.

Suitable for dental technicians:

OptraSculpt Pad is also optimally suitable for applying and modelling lab composites. Therefore, the efficient processing of composites is equally supported in dental labs.

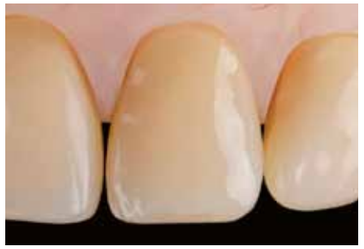
Non-stick shaping and contouring
The non-stick attachments of OptraSculpt Pad enable composite materials to be shaped and contoured with ease, without leaving any unwanted marks. Thus, composite restorations with smooth and even surfaces are fabricated with utmost efficiency.

Shaping and contouring with OptraSculpt Pad

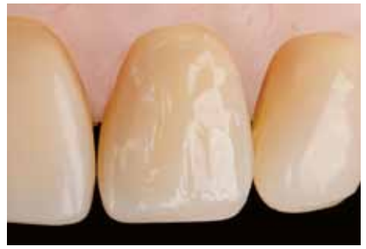


Shaping and contouring with a metal spatula

Smooth and even surfaces
Due to the special material of the pads, natural-looking restorations are easily accomplished in only a few steps. The highly flexible synthetic foam pads optimally adjust to the anatomical contours and allow smooth modelling.



Result achieved with OptraSculpt Pad



Result achieved with a metal

Professional esthetic results
The reference scales on the instrument handle assist in the creation of esthetic and anatomically-correct restorations. The markings allow the clinical situation to be compared with the ideal average tooth width proportions and angular alignments in the upper anterior dentition.

Reference scale 1

Reference scale 2

For further information, please visit www.ivoclarvivadent.com

RESORPTIONS

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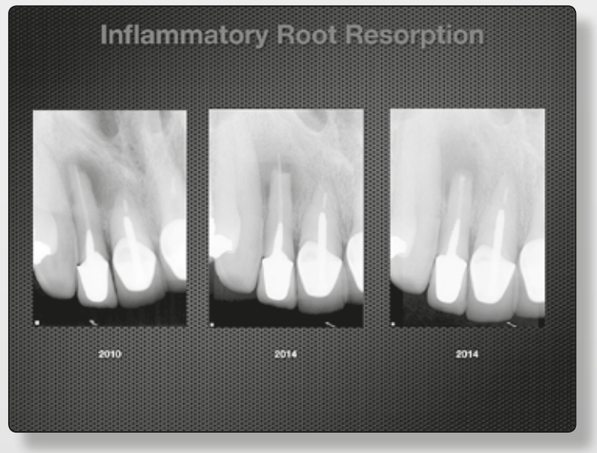

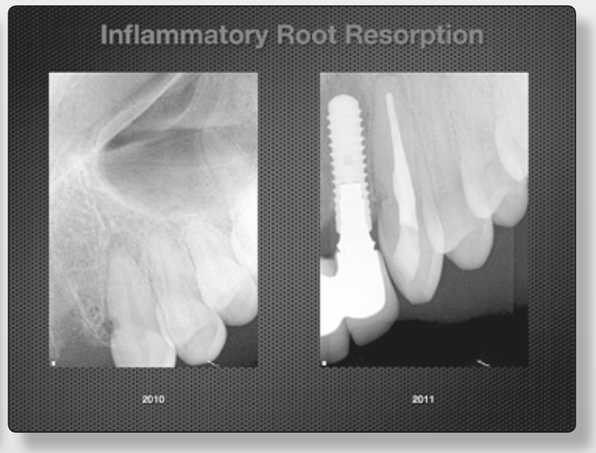

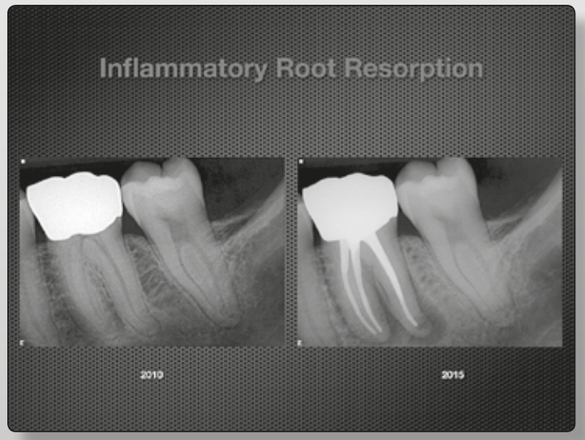

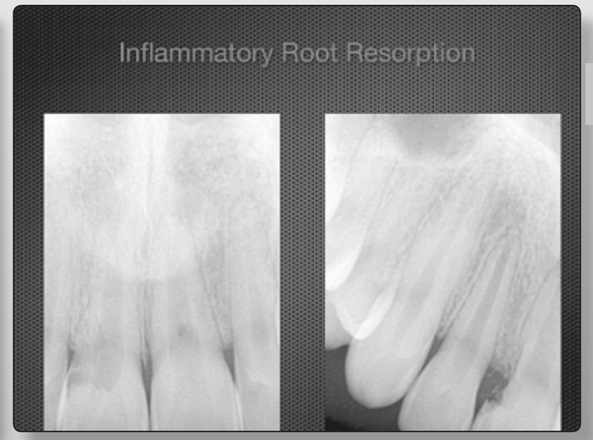

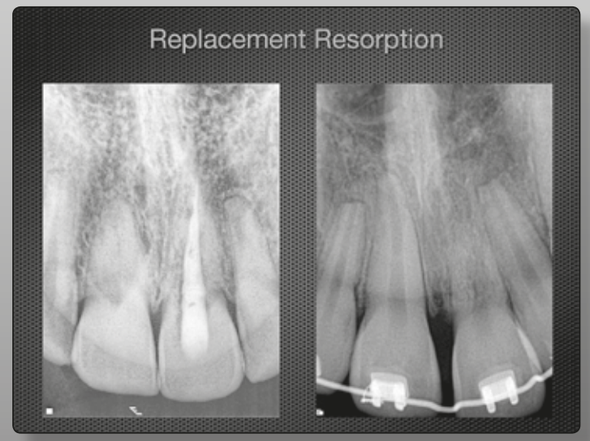

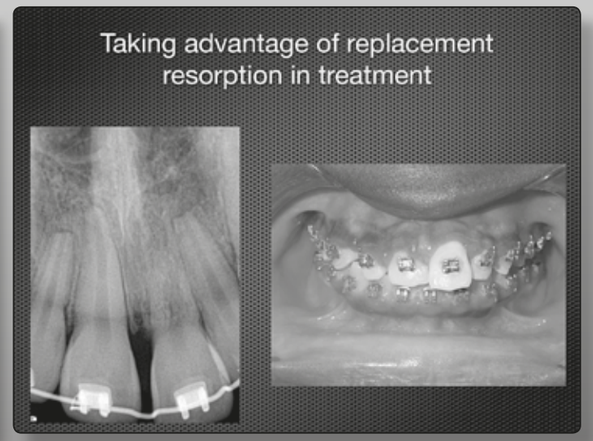

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RESORPTIONS

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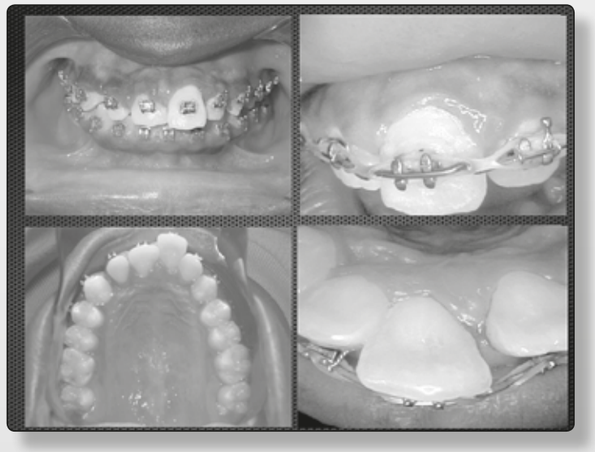

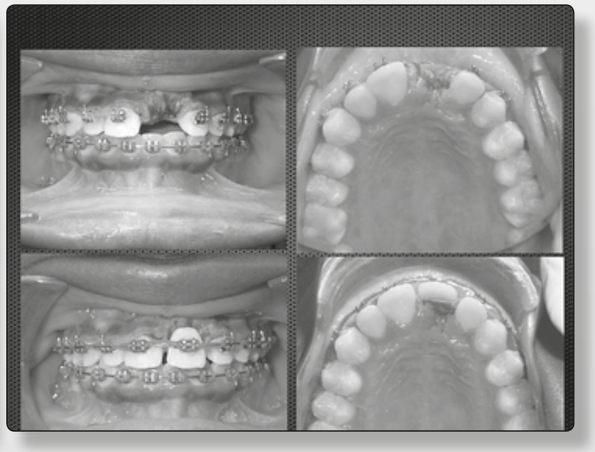

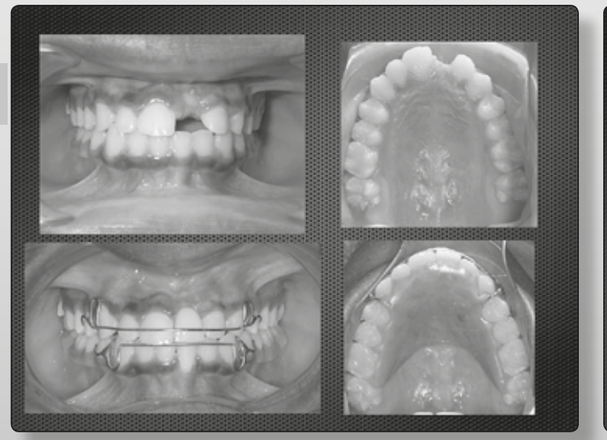

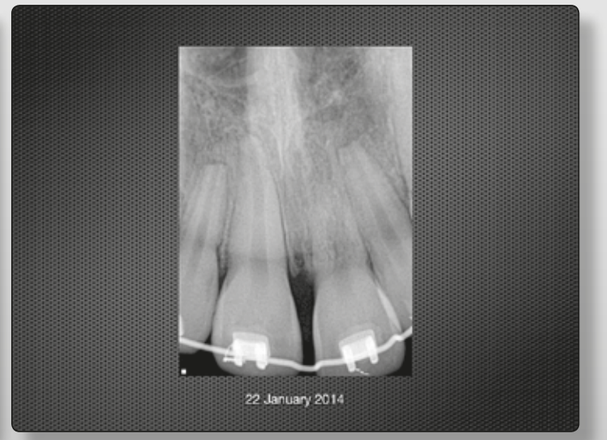

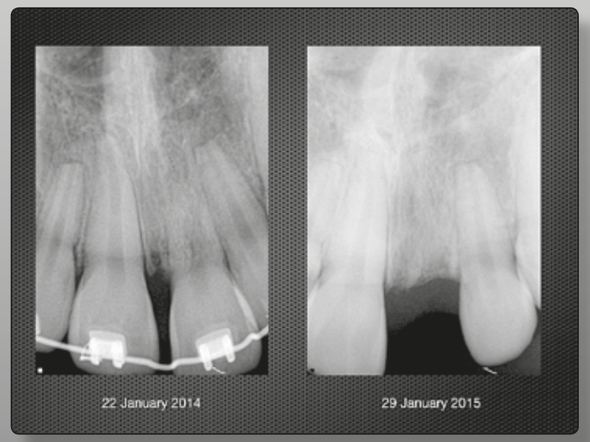

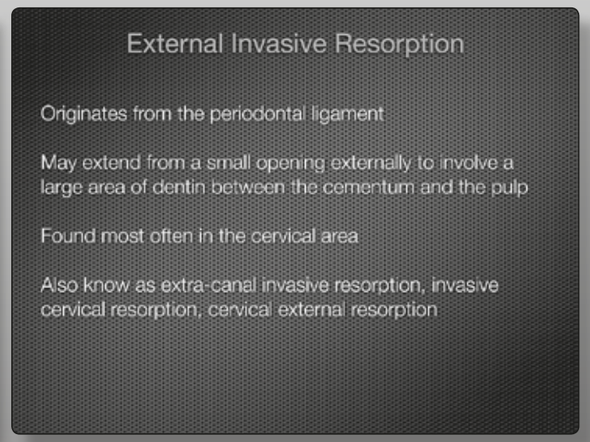

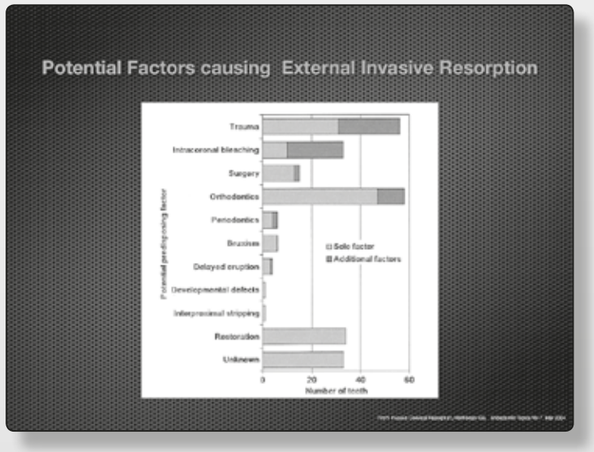

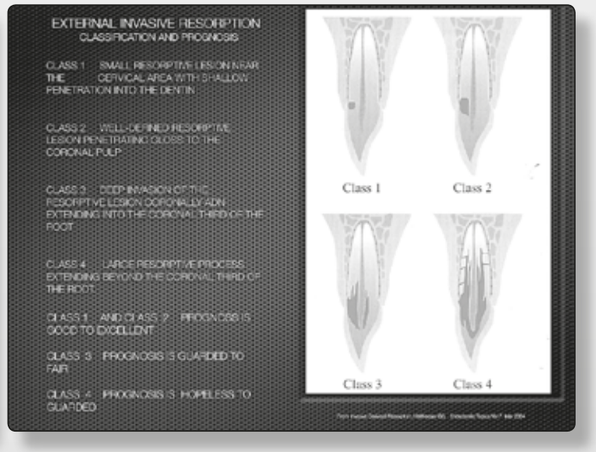

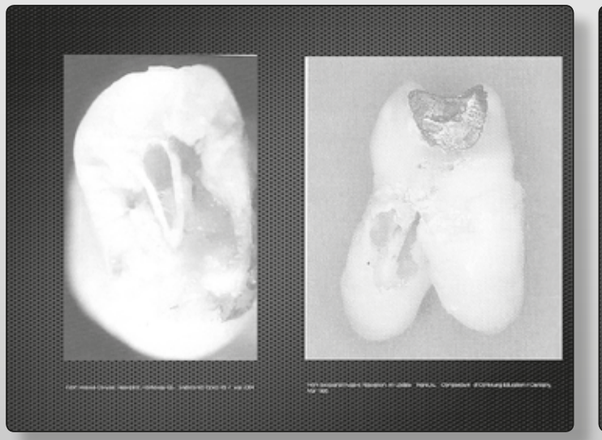

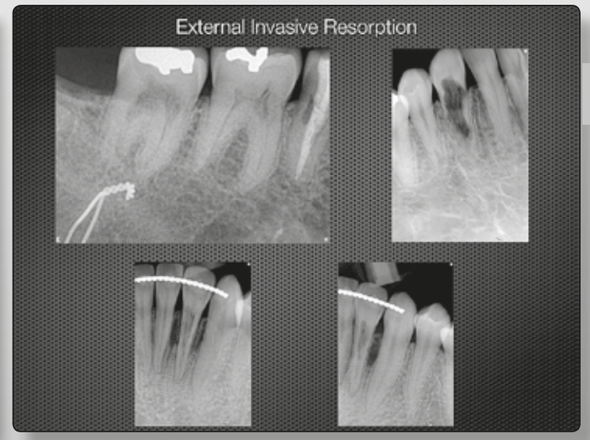

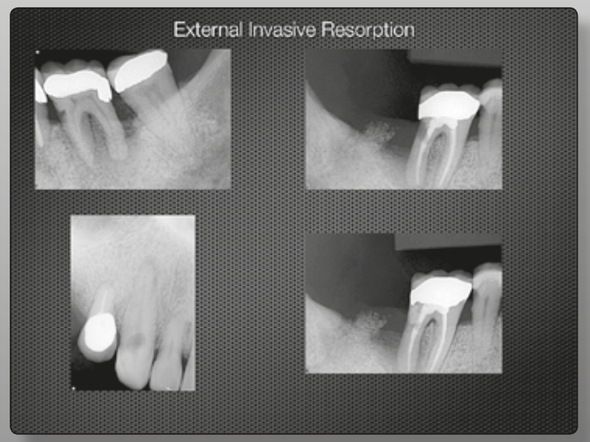

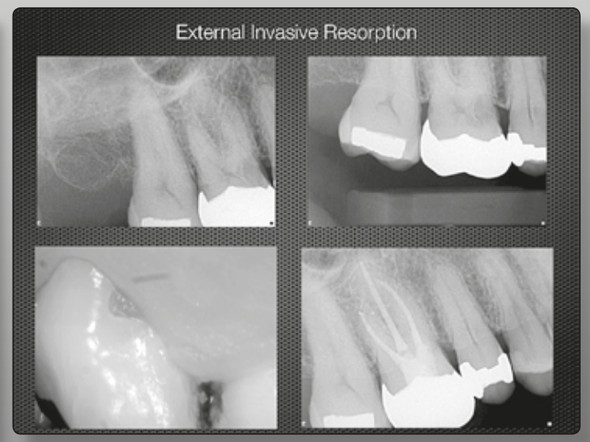

FIRST AID COURSE

Dr. Andrea Agius

Emergencies can and unfortunately do happen. The term emergency can be defined as a serious, unexpected and often dangerous situation requiring immediate action.[1] A medical emergency in dental practice can be experienced by a practitioner once every four and a half years, according to study conducted over a ten year period.[2]

Training in the management of medical emergencies should be a priority for all general dental practitioners. All the dental team should be trained and prepared to deal with a medical emergency. However, since such techniques are not frequently used, it is important to constantly update our knowledge and skills so that we can ensure immediate action once a medical emergency arises.

More than 54 percent of emergencies occur during or right after local anesthesia. The types of treatments cited with the greatest percentage of emergencies are two procedures associated with potential high patient anxiety - tooth extraction and pulp extirpation.[3]

The 'hands on' day course was headed by Dr.Adam Bartolo.

MEDICAL HISTORY

The importance of taking a thorough medical history and compiling a medical risk assessment was stressed. As the population is ageing, many older patients are on multiple drugs at the same time, i.e polypharmacy. Therefore, accurate and attentive medical histries have never been more important.

BASIC EMERGENCY DRUG KIT

- Glyceryl Trinitrate Spray
- Salbutamol Aerosol Inhaler (100 micrograms)
- Adrenaline injection
- Aspirin (300mg)
- Glucagon injection
- Oral glucose solution/tablets/gel/ powder
- Midazolam injection (10mg in 5mL)
- Hydrocortisone sodium succinate (100mg with 2mL diluent)
- Oxygen

Every dental clinic should have at least the drugs outlined above in the emergency kit. The dentist also must have the knowledge to administer these drugs in the proper doses as treatment for specific emergencies.

MEDICAL EMERGENCIES MANAGEMENT

Fainting:

- Call for help.
- Tilt the chair back.
- Raise patient's left so that they are above their head.

Choking:

- Sit patient upright and allow them to cough vigorously.
- Remove any obstructions from mouth
- Aspirate
- If patient not recovering apply sharp blows to the back. If necessary perform abdominal thrusts

Hypoglycaemia:

- give oral glucose
- if patient becomes unconscious give glucagon intramuscularly

Anaphylaxis:

- lie patient flat and administer oxygen
- administer adrenaline
- if no improvement after 5 1 minutes this should be repeated.
- chlorphenamine, (antihistamine)
- hydrocortisone sodium succinate.

Epilepsy:

- do not restrain patient, give glucose as may be a fit due to hypoglycaemia.
- midazolam
- once fit has stopped place patient in the recovery position.

Asthma:

- give patient own bronchodilator (salbutamol used with a spacer).
- give high flow oxygen
- administer hydrocortisone sodium succinate

Angina:

- GTN sublingually immediately relieves symptoms.

Myocardial Infarction:

- place patient in a sitting position and give oxygen
- sublingual GTN
- 300mg aspirin

Cardiac arrest and Stroke

- start Basic Life Support

BASIC LIFE SUPPORT

Knowledge of BLS and practice of simple CPR techniques ensures the survival of the patient long enough till experienced medical help arrives and in most cases is itself sufficient for survival.[4]

- Stay calm and ensure you and staff are safe
- Check for patient response
- Use the ABC approach to check patient response
  - Airway – look for signs of obstruction and breathing problems
  - Breathing – check depth and rhythm of breathing. Adults around 12-20 breaths per minute and children 20-30 breaths per minute. Observe any paradoxical chest and abdominal movements ('see-saw' respirations). Also note if any accessory muscles of respiration are being used.
  - Circulation – central cyanosis makes the lips and tongue blue

Continues on page 14.

FIRST AID COURSE

Continues from page 12.

- Shout for help
- Open airway
- Check breathing for approximately 10 seconds
- Ask person who came to help to call emergency number, (112)
- Start off with 30 chest compressions. The goal is to compress the chest at least 5-6cm at a rate of 100-120/ minute. This is then followed by 2 rescue breaths. Chest compressions should never be stopped.
- The AED should be turned on. Modern units help lead the emergency situation issuing verbal prompts when to start and stop chest compressions and when to issue a shock.
  - Shock advised – the AED will automatically charge and instruct the dentist to press the AED button to defibrillate the patient.
  - No shock advised – no shock indicated.
- Ventilation can be achieved by setting up a mask and oral airway together with oxygen.

Being ready to tackle a medical emergency is vital for us dentists.

Personally I feel that 'hands on' training is vital for instilling the importance of sharpening our skills for facing such clinical situations.

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1. Oxford English Dictionary (2005) Compact Oxford English Dictionary for Students. Oxford: Oxford University Press.

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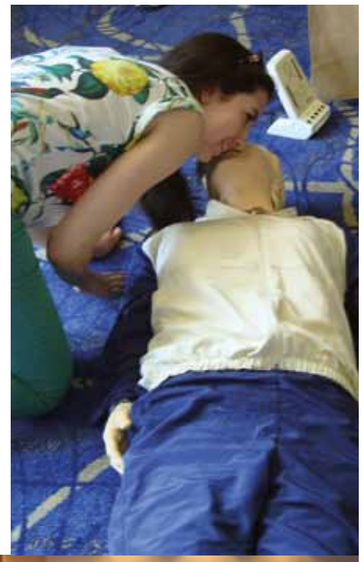

SUNDAY ROSTER

Dear Colleagues,

As some of you might know, one of the items discussed in the Annual General Meeting of the Dental Association of Malta was the feasibility of a pilot scheme providing emergency dental treatment on Sunday mornings on a clinical roster basis.

This scheme was discussed at length and was approved almost unanimously by the members present.

For those who were not present or to clarify any points raised, the following information has been compiled.

HOW DID THIS COME ABOUT?
The idea sprung during various discussions amongst dentists at formal and informal events. Whilst the possibility of a private cooperative effort amongst a group of dentists existed I always felt that the National Dental Association should be the correct platform for implementing such a scheme.

It is no secret that there has been a gradual shift in public opinion towards our profession. Many feel that the rise in commercialism and advertising is leading to a shift in public perception towards dentists in their role as oral physicians. In addition the new reality of instant social media with parents bemoaning the lack of treatment for traumatised children surely does not do us any favours.

This scheme would show that dentists have their priorities right and also be a wonderful opportunity for the profession to come together as one.

CAN'T THEY JUST GO TO MATER DEI OR FLORIANA?
No state dental facility is open between Saturday 1pm and Monday 8.00 am. There is a consultant on call, however only for the most serious emergencies.

DO I HAVE TO TAKE PART?
Participation is entirely voluntary.

WON'T I GET LOADS OF TIME WASTERS AND PATIENTS WHO TAKE ADVANTAGE?
One of the key foundations of the scheme is a €50.00 surcharge in addition to the usual fee charged by the dentist. For example, if an extraction is performed and the dentist's usual fee is €40.00, the total fee will be €90.00.

It is extremely important that this fee is consistently and rigorously applied. It underpins the whole protection of the scheme to abuse and adequately compensates the dentists taking part in the scheme.

RIGHT, SO WILL MY PATIENTS LEAVE ME FOR ANOTHER PRACTICE?
It is impossible for a dentist to be available 24/7. Patients in extreme distress will desperately seek out dental care, whatever their relationship with their dentist. This scheme provides a humane, ethical and moral solution to fulfilling one of our primary duties as health professionals, that of alleviating pain and assisting patients that require urgent care. Emergency dentists will be providing full information and any radiographs to be handed to the patients' usual dentist.

The collective cooperative nature of the scheme will ensure that a true collegial spirit prevails. We are all bound to have patients slipping poolside on a Sunday. Would you opt to leave them to their own devices?

It is important to understand that we are not reinventing the wheel here. Vets have long organised such a scheme amongst themselves. Pharmacists also operate a similar roster, with adherence to this roster being a state requirement.

I WORK HARD ALL DAY INCLUDING SATURDAYS DON'T I DESERVE A DAY OFF?
If there is a minimum of 25 dentists signing up to the scheme we would be looking at approximately twice a year opening. Of course if more sign up that would be even less. One is always free to take the day off after!

WHAT IF A SERIOUS EMERGENCY CROPS UP FOR THE DENTIST AT THE LAST MINUTE?
Dentists participating would need to pair up with another clinic which would take over for the day if the dentist on call is seriously ill or has an emergency.

OK I'M SOLD, HOW WILL IT ACTUALLY WORK?
The simpler the better.

We will obtain a mobile phone number and phone. This number will be made known to all newspapers, media, social networks, hospitals and of course dentists. The phone will be held by the dentist on call, who will then pass it on to the next dentist in time for the next Sunday.

How will the roster be drawn up? By lot during a final meeting prior to the scheme commencing. One can feel free to swap dates with other clinics on a centralised email system which will be set up.

What about other public holidays? This is a pilot scheme which for now will be only in force on Sundays.

Thanks and Regards,
Dr. Daniel Cassar Darien DDS. Ath., MJDF. RCS. Eng.

CLASS OF 1985 REUNION

Dr. Mary Anne Farrugia B.Ch. D. (Hons)

It was the start of October 1980 when our group, originally eleven in number, first met in the dark, gloomy corridors of the ground floor level Dental Department, at St. Luke's Hospital. We eyed each other suspiciously and forced ourselves to smile nervously as Prof Hector Galea introduced himself and showed us around the place, which would become our second home in the coming years.

We were split into two groups: Lino Said, Mario Camilleri, David Debono, and I comprised the 'work-phase' group, which alternated with the 'study' group, consisting of Alex Azzopardi, John Felice, Joseph Xuereb, Vince Muscat and Mark Sciberras. Then, we were simply a bunch of gawky students, all clad in blue jeans, tight T-shirts and sneakers, sporting funky 80s hairstyles and some wearing metal-rimmed spectacles which encompassed the authentic geeky/nerdy look which seemed to be the rage at the time.

We very rapidly became bosom friends and enthusiastic greenhorns sharing a fiery passion for dentistry. Imbued with an innate sense of ambition, mixed with a healthy dose of joie de vivre, we eagerly absorbed a myriad of dental techniques and procedures deftly performed by various dental professionals. These people dedicated precious time and patience to teach us the intricacies and often complex aspects of our future profession. Strong bonds forged through hectic months spent working together helped alleviate the tensions experienced during the eighties which saw seismic upheavals in tertiary education and massive changes at Medical School in particular.

Fast forward to 2015, where it was unanimously decided that our group would mark the occasion of the 30th anniversary from the date of our graduation as dental surgeons from the University of Malta in March 1985, by celebrating in style.

At first, several ideas were promoted: wild weekends on some exotic island, or the usual, ever faithful, quiet Gozo retreat or even a quick getaway to some luxurious farmhouse in nearby Sicily seemed tempting. However, life with its unpredictable roller coaster twists and turns of fate soon took the upper hand, so we shelved our crazy plans and opted to spend an evening together in Malta.

The group therefore met on a balmy Saturday evening on June the 13th 2015 ,which was carefully chosen as the ideal date whereby all agreed we would celebrate by having dinner together at Acqua restaurant, one of the finer eating places at the Portomaso Marina. The event was kindly sponsored by Mr John Jaccarini, director of Prohealth and supplier of KinCare products, and organised by the lovely and competent Fiona, who ensured that the entire evening would be a splendid one.

As we stood at the bar, drinks poured freely and consumed with alacrity eased off any awkward moments that elapsed till everyone arrived, partners and spouses included. Unfortunately, Alex Azzopardi was unable to attend, and regrettably his absence was felt.

However, we soon shifted into a lively and animated banter mode, as we drifted down memory lane and took turns to recount hilarious episodes from our colourful student days....of hot, humid days (There was no air conditioning then) spent carving and casting models in the dental lab under the watchful eyes of Johnny Zarb, Eddie Buttigieg and John Salomone Raynaud, who fixed many a blunder and botched up job with a wry smile and a groan! Of orthodontic sessions under the hawkish supervision of Mrs Hawley, who drove to work in a much coveted silver metallic X19 sports car which roared through the gates of St Luke's with attitude and desired effect.

We recalled our tutors and mentors, Prof Hector Galea, Dr. Joe Camilleri, Dr. Charles Galea Bonavia, Dr. Salvu Agius and Dr. Tonio Cachia, and later Dr Maha Agius and Dr Alex Cassar and Dr Tom Ferris who were ever ready to impart with their knowledge and expertise and swiftly come to our rescue whenever we panicked without any fuss at all.

Continues on page 20.

CLASS OF 1985 REUNION

Continues from page 18.

We remembered other members of the dental team, Ms Carmen Seychell, the keen head hygienist , the efficient dental nurse Ms Cauchi and Mrs Gatt, Ms Magrin and Ms Giulia and Zarena the health auxiliary who all managed to leave an indelible impression on our young minds.

As one delicious course gave way to another, washed with some seriously heady wine, we grew rowdier and laughed more heartily at our own recollections from the 'good old days' where we teased and joked about our own foibles, which we invariably magnified for maximum effect.

We spoke about our diverse hobbies, David the golf-guru; Mario's passion for scuba diving; John's love of travel and new culinary experiences, Lino's passion for wine making, Joe's love of travel and wining and dining, Vince's accurate reminiscing of past events and hilarious story telling skills, and Mark's wonderful and amazing large family and his wife Miriam's commendable support for pro-life issues. Not to mention my own little world of tremendously vibrant, high- speedy-Gonzales work/family juggling act!

Though essentially thirty five years have elapsed since our first encounter, I must confess that we have all retained our essential characters, albeit wider at the waist, greying at the margins and hopefully wiser with the passage of time.

Most members of our group have immersed themselves into general dental practice and some have diversified into such fields as Orthodontics, Geriodontics, Implantology Dental Ethics and Oral Surgery. Joseph Xuereb and Mario Camilleri have even been brave enough to produce second generation dentists, by enticing their offspring to follow in their dental footsteps!

In summary, we are thankful that we have been blessed with knowing one another for over a third of a century and kept up our friendship throughout this time.

We are indebted to all those dedicated professionals who helped us come this far and sincerely thank Mr. John Jaccarini and Fiona for organising such a memorable event.

THE CAMBRIDGE CENTRE OF IMPLANTOLOGY

By Dr David Muscat

The Cambridge Centre of Implantology holds a 1 week residential component of the course in the Moeller Centre, Churchill College, Cambridge. This is done in conjunction with Nobel Biocare.

This is a start to finish certified training programme, suitable from beginner level upwards.

Successful completion of the course results in the award of the Academy's 'International Certificate in Dental Implantology' and the chance to progress to Diplomat Membership of the Academy. The theory component is delivered as a structured programme of 25 online modules. The surgical skills component is taught at Churchill college. This involves surgical gowning and gloving; computerised treatment planning; single and multiple unit implant placement; flap raising; suturing techniques; bone augmentation techniques and prosthetic protocols.

Following the course one can submit 3 mentored cases for Diplomat status.

THE VOCO HANDS ON EVENT

AT THE PHANTOM HEAD ROOM, FACULTY OF DENTAL SURGERY UNIVERSITY OF MALTA ON 20TH JUNE 2015

With Dr Mark Hill BDS MSc DGDP(UK) LDS. Organised by Page Technology Ltd
Salient points summarised by Dr David Muscat

ADMIRA FUSION
This is a new nanohybrid ormocer restorative material. This is an example of pure silicate technology. It is the first purely ceramic based material The nanoparticles are silicon dioxide so there are no shrinkage problems. It is 84-86% filled. The resin is an ormocer and there are also glass particles. The pure ormocer resin matrix shows the highest level of biocompatibility.

With nanohybrid technology, there is a high filler content; high surface hardness and edge strength. This is important during polishing. There are outstanding shrinkage stress properties and is resistant to discolouration.

The material is compatible with all conventional bonding agents. The high lustre polishing procedure coupled with high surface hardness guarantees long term results.

The material can be used for 1 to V restorations and as a base in class 1 and 11 cavities, correction of shape and shade for improved aesthetics; repairing veneers; small enamel defects and temporary crown and bridge materials ,core build up and composite inlays. It can also be used for splinting lower anterior teeth.

ADMIRA FUSION EXTRA
This has the lowest shrinkage and lowest shrinkage stress. It shows best marginal integrity. It can be reliably cured up to 4mm in 20 seconds. There is a universal shade with chameleon effects. The overall shrinkage is only 1.255 by volume. The material cuts like a ceramic.

INDICATIONS FOR FRC TECHNOLOGY
- Removable appliances
- Bridges
- Crowns
- Splints
- PMMA PLUS BIS GMA=IPN

CERAMIC POSTS
- Tapered shape=minimal removal of root canal dentine.
- Modulus of elasticity similar to dentine=distribution of forces at the coronal to minimise root fracture
- Translucent=provide aesthetics and facilitates light curing
- Excellent fatigue resistance=durable post
- Radiopaque=x ray detection
- Aesthetics=ceramic restoration provides max surface area

REBILDA POST SYSTEM
- Post endodontic treatment in one set
- Most root fillings fail due to poor restorations.
- 2mm ferrule is needed for a good ceramic post otherwise use cast metal post.
- A [post in fact weakens tooth and the only reason for it is to keep the core in the tooth.
- Rebilda Post has a dentine-like modulus of elasticity.
- Rebilda DC is indicted for post luting. It can be ground like dentine.
- It has a low setting temperature.

THE STRAUMANN ITI PROSTHETIC COURSE

Presented by Mr David Dias, at Marie Louise Suite Radisson St Julians 28/29 May 2015
In conjunction with Bart Enterprises Ltd. Summarised by Dr David Muscat

Prosthetics is considered to be straight forward but there are many parts and components. Screw retained restorations are more predictable and easy to manage.

There are two fundamental implant designs- soft tissue level and bone level.

The neck is important to allow us to manage the soft tissue.BL1 allows for more flexibility. The diameter of the mergence profile is an important factor. The emergence of the tooth has to respond to natural design.

BL! No prosthetic platform- diameter fits within a certain bone parameter.

TL prosthetic diameters are NNC yellow narrow neck ; RN purple regular fit; WN wide neck. Colour coding is present in every component. One has to choose the corre4ct implant platform.

Indications for soft tissue implants are as follows:

1. posterior region
2. fixed partial restoration
3. cemented
4. screw retained

Whether to use NNC, RN or WN has to analysed before surgery.

Check:

- the smile line
- Level of lip
- Is emergence profile visible?
- Some people who smile show first molar- problem

The standard plus implant would not be the right indication. The standard has a 2.5mm neck and is used for locators with overdentures. It is important to use a neck that emerges from the soft tissues.

SOFT TISSUE LEVEL IMPLANTS

- Edentuluous jaws
- Removable restoration
- Locators
- Bars

To avoid microgaps ,the connection between the abutment and the implant must be visible to avoid bacteria/food. Here the standard implant still serves a good purpose.

TISSUE LEVEL IMPLANTS

Simplify work in posterior region only.

LIMITATIONS OF SOFT TISSUE LEVEL IMPLANTS=INDICATIONS FOR BONE LEVEL IMPLANTS

1. high aesthetic risks(thin tissue biotype, high lipline)
2. reduced interdental space
3. Reduced interocclusal space
4. extended edentulous spaces in aesthetic zone(provide bone for papilla). With BL1 you can gain 1.8mm of height in reduced inter-occlusal space.

One has to define parameters at the planning stage. The top of the screw head is the defining level. You are 1.6mm above the top of the implant.

You can get down for insertion of screw.

Check implants according to tooth sites. This is a first determining parameter.

It is better to have a smaller diameter and then build it out.A larger embrasure can be easier to manage.

Biologically, 1.5 mm between the implant and the adjacent tooth. If you reduce 1mm or less, you will get bone resorption due to lack of blood supply.

A 4.8mm diameter implant implies 6.5 mm requirement.

Re the BL1 – m3 diameters 3.3 4.1, 4.8mm (same as TL1)- these are chose according to root dimensions. The 4.8mm are used for molar sites bit als0 other sites.

ANTERIOR=AESTHETIC

Prosthetically driven planning.
Position =+function.

PLANNING PROSTHETICS

- Define the final tooth position
- Define the bone width and height
- Implant axis
- Diagnostic wax up-alignment/study models
- Identify medical aspects
- X ray stent-transfer info from diagnostic wax up
- Do we have right bone elements? The surgeon can follow the decision made in the surgery.-chirurgical stent.

POSTERIOR ZONE

- Maintain adequate embrasure space
- Facilitates cleaning
- Prevents damage to teeth during surgery
- Prevents crestal bone loss

Continues on page 29.

SEARCHING FOR A PROFESSIONAL INDEMNITY INSURANCE POLICY?

The Dentists' Professional Indemnity Insurance Scheme has been set up exclusively by MIB for the members of the Dentists Association of Malta. If you are searching or about to renew your Professional Indemnity Policy don't do so before getting in touch with MIB:

MIB will ensure the following:

✓ Most competitive premium available for Professional Indemnity cover in Malta & Gozo;

✓ Widest cover available;

✓ Various Limits of Indemnity to choose from;

✓ Optional extensions to choose from including:
- European Jurisdiction
- Retroactive Cover
- Botox & Dermal fillers extension

✓ Claims support in the event of a claim

On the other hand if your policy is already under the scheme, kindly ensure that:

✓ Your limit of indemnity is still adequate;

✓ Your cover still reflects your present operation, example if you are performing Botox &/or Dermal fillers you have availed yourself of the relative extension.

Contact MIB for a no obligation quotation on +356 234 33 234 or email info@mib.com.mt

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MEDITERRANEAN INSURANCE BROKERS

MIB is Malta's largest insurance broker and risk management services firm, the local pioneer in this section with over 38 years of proven track record serving some of Malta's major public and private corporate entities. MIB is the independent broking arm of MIB Insurance Group.

THE STRAUMANN ITI PROSTHETIC COURSE

Continues from page 25.

ANTERIOR ZONE
Problem if too labial. Soft tissue biotype. Angulation can push prosthetic platform too labially. With very angled abutments there is a wear factor, and more compressive forces.

RESTORATIVE DRIVEN APPROACH
- All team present
- ITI risk factor table
- Tool on website SAC-put in parameters of case
- Risks; limitations; recommandations; type of restoration; parameters to respect; available free of charge.

AESTHETIC PARAMETERS
- Gingival health
- Interdental closure
- Tooth axis
- Contact points
- Tooth dimensions
- Tooth shape- form
- Symmetry
- Look at smile-is it aesthetic zone or not?
- If there is a low lip line-it is straightforward.
- The visible tooth proportion is important. One has to define the final tooth shape.
- A triangular shape is a high risk. There is difficult space management. It will mean long deep papillae.

Gingival contour segments-has to be well aligned.

PRE SURGERY PLANNING
Size, Shape, Axis, Position, Gingival Contour, Symmetry Diagnostic Wax Up, Occlusion, Resoration Contours, Tooth Psoition, Prosthetic Design, Index Keys.

THE AESTHETIC IMPLANT-THE ITI GUIDE FOR THE 3D IMPLANT POSITION
- Correct vertical position of implant shoulder
- Correct oro-facial position of point of emergence
- Communication is key-surgeon-technician
- Define the final emergence profile with a surgical stent-to show the surgeon where to place implant.The diagnostic wax up –made a aesthetic surgical template-1mm vacuum form for template.
- The central papilla is deeper than the lateral, but crowns will become squarish. Squarish crown=squarish face.

IMPRESSION PROCEDURES
Bone level-15 degree fit- stability 4 grooves-anti-rotation and positioning. Cross fit. Synocta-still have morse taper concept.

Combination of morse taper and octagon. 8 positions – provides good stability to register a 4D implant position during impression for the correct final position.

IMPLANT LEVEL IMPRESSIONS
Most uses ,most flexible. Transfer the post and lab analogue. Select on the model.

ABUTMENT LEVEL IMPRESSION
Select abutment, insert it in its final position

OPEN TRAY TECHNIQUE
Better – always a stable transfer but has to fit properly. Loosen the screw, transfer before.

CLOSED TRAY IMPRESSION
Insert transfer afterwards. Snap components – care with impression material- has to be fluid material.

With the OPEN tray colour coding is important. There must be no gap between the transfer and the implant. It is recommended to take an x ray to see if there is a black line – indicates friction as did not go all the way down.

Loosen, let drop down- otherwise the crown will never fit correctly.

With the CLOSED tray-the cap is snapped on . If the implant is deeply placed, it may feel like it is snapped on – so this is N OT recommended for deeply placed implants.

DEEPLY PLACED= OPEN TRAY
The advantage of the OPEN tray is that it will push away the tissues. The transfer pushes out tissues as it has an emergence profile which corresponds to healing abutment as it is exactly the same diameter. With the CLOSED tray, if you have to use pressure it is not properly seated. This is made of plastic and there is a danger that you can destroy the corners of the octagon. With the closed tray position the flatside MD.

MODIFIED IMPRESSION TECHNIQUE
One can modify the impression coping so as to reproduce the temporary onto the impression transfer.

CEMENT VERSUS SCREW RETAINED
- Screw retained – minimum height of 4 mm for cementation. On top of this 2 mm more reqd. Long term screw retained more viable. Bone level best solution as it is a one piece solution.
- Elimination of cement margin. Cement causes peri-implantitis and bone loss.
- Retrievability –easy access to implant
- Easier to repair if ceramic fracture or chip.
- Screw channel will have highest impact forces
- Less aesthetic
- Higher level of expectation from the lab
- More expensive
- Work with noble materials such as gold
- Achieving a passive fit-screw loosening, screw fracture, framework fracture, implant fracture

RISK FACTORS OF IMPLANTS
Smoking; Hormone Replacement; Radiation Therapy; Diabetes.

ABUTMENT OPTIONS
- Tissue level-synocta, angled
- Bone level-Ips e max abutments, gold abutments.
- Variobase-The crown is cemented onto the abutment- remove the excess cement, and then screw in.

THE VARIOBASE ABUTMENT
Is a titanium base onto which customised shapes in different materials can be cemented upon(outside the patients mouth). Variobase is very cheap

THEME AND MESSAGES FOR THE EUROPEAN ORAL HEALTH DAY

1. THEME OF THE EUROPEAN ORAL HEALTH DAY 2014

Based on the recommendation by CED Working Group Oral Health, CED Board decided during its meeting in May 2014 to focus on the theme "Oral health and diabetes" on the occasion of the European Oral Health Day on 12 September 2014. Working Group Oral Health has prepared the following messages and suggestions for activities to support CED members who wish to draw attention to the topic and to the European Oral Health Day.

2. MESSAGES ON ORAL HEALTH AND DIABETES

A. For dental practitioners

Diabetes mellitus is a syndrome of abnormal carbohydrate, fat and protein metabolism that results in acute and chronic complications due to the absolute or relative lack of insulin. It is a disease with concomitant oral manifestations that impact dental care. Diabetes often is associated with periodontal disease. Diabetes is a risk factor for periodontal disease and studies revealed a significantly greater rate of progression of periodontal disease among people with diabetes, compared with those without.

Glycaemic control and periodontal status have a bidirectional relationship, careful glycaemic control results in improved periodontal status and vice versa. Periodontal diseases can be considered as the sixth '-opathy' of diabetes. This is a timely issue because during the last decade the number of the people suffering from diabetes increased dramatically in EU and around the world while public awareness of how to prevent oral disease in diabetes patients is rather poor.

This presents a unique opportunity to raise awareness about the links between diabetes and oral health and about the important role dentists can and increasingly do play in early diagnosing and managing patients with diabetes across the EU. These links should be highlighted at undergraduate level and as part of the continuous professional development.

B. For the general public

Diabetes Mellitus is a disorder in which blood sugar (glucose) levels are abnormally high. This can lead to nerve damage, blood vessel damage and increased risk of infection.

- When the levels of sugar in the blood are high, the cells in the blood stream that kill bacteria (white blood cells) cannot work properly. The body therefore becomes less able to fight infections.
- If the sugar level is not controlled properly in a patient with Diabetes Mellitus it will lead to higher than normal levels of sugar in the mouth therefore encouraging the growth of the gum disease-causing bacteria.

Other most common oral health problems affecting patients with diabetes are: dry mouth, poor healing and oral infections.

FACTS AND FIGURES

- Globally, it is expected that the number of people with diabetes will increase from 382 million in 2013 to 592 million by the year 2035; in Europe, the projected increase will be from 56 million to 70 million by 2035;
- Age is an important risk factor for type 2 diabetes due to the ageing of the population in Europe; Europe has also the highest number of children with type 1 diabetes;
- The increase of number of people with diabetes in Europe means higher costs to healthcare: they equal to 10% of all costs in 2013 and will raise from €109 billion to €117 billion in 2035; the costs associated with diabetes include increased use of health services, productivity loss and disability, which can be a considerable burden to the individual, families and society;
- A vast majority of people with diabetes live in low- and middle-income regions. These socially vulnerable and excluded groups of population face a higher burden of diabetes and a greater barrier to prevention and care.

DIABETES CAN BE ADDRESSED FROM THE FOLLOWING ASPECTS:

A. The impact of diabetes on oral health

B. The role the dentist could have in treating patients with diabetes as they normally see patients on a regular basis. The clear link between oral diseases and diabetes provides an ideal opportunity for oral health professionals to take part in providing safe and effective oral healthcare for patients with diabetes.

A. DIABETES AND ORAL HEALTH

Patients with diabetes present a greater risk of developing a number of serious oral health problems. These can be gingivitis and periodontitis, dental caries, salivary gland dysfunction, oral mucosa disease, oral infections and oro-facial sensory disturbances.

1. ***Gingivitis and periodontitis***
Based upon literature it is well-documented that a clear relationship exists with regard to the prevalence of diabetes mellitus and the prevalence of gingivitis and periodontitis among adults.

   Treating chronic periodontal infections is essential for managing diabetes. There is a negative correlation between the prevalence of periodontitis and glycaemic control.

2. ***Dental caries***
No clear association between diabetes and dental caries has so far been clarified. However, patients with diabetes have been reported to develop more dental carries.

3. ***Salivary gland dysfunction***
Patients with diabetes have been reported to complain of dry mouth, or xerostomia, and experience salivary gland dysfunction.

4. ***Oral mucosal diseases***
Patients with diabetes are more likely to develop oral mucosal diseases such as lichen planus, recurrent aphthous stomatitis, as well as oral fungal infections.

5. ***Oral infections***
The presence of opportunistic infections, such as oral candidiasis is another manifestation of diabetes. Fungal infections of oral mucosal surfaces and removable prostheses are more often reported in patients with diabetes.

6. ***Oro-facial sensory disorders***
Burning mouth or tongue syndrome has been associated with diabetes. The disease can also cause taste, neurosensory and visual disturbances.

B. DIABETES IN THE DENTAL CARE SETTING

The prevalence and incidence of diabetes mellitus increase. Therefore, in years to come dental practitioners will encounter an increasing number of patients with diabetes.

Dentists can and do play an important role in early diagnosing and managing patients with diabetes.

They can counsel them about improving glucose regulation, maintaining oral and nutritional health, performing daily glucose monitoring test and seeing health professionals for routine care.

Understanding of the disease as well as familiarity with its oral manifestations can not only promote oral health in patients with diabetes but also enhance their quality of life.

The role of dentists in treating patients with diabetes:

- They are concerned about the adverse effects in the oropharyngeal region
- They see patients on a regular basis, thus providing opportunities for early detection and treatment of diabetes by taking and frequently updating medical history; when an indication of diabetes presents, dentists can refer patients to medical doctor for further diagnosis and treatment planning;
- They often have access to healthy patients during preventive visits, giving them the opportunity to communicate with them before onset of disease (early prevention);
- They often have more time with patients than many other health professionals, providing opportunities to integrate education and intervention methods into practice;
- They can arrange optimal periodontal care for patients with diabetes;
- They can monitor symptoms which suggest oral healthcare and treatment on an ongoing basis and arrange appropriate treatment;
- They often have more time with patients than many other health professionals, providing opportunities to counsel their patients about maintaining good oral hygiene and a healthy diet;

3. ACTIVITIES CONNECTED TO THE EUROPEAN ORAL HEALTH DAY 2014

Organisation of activities connected to the European Oral Health Day will be up to national dental organisations. The CED recommends that national dental organisations:

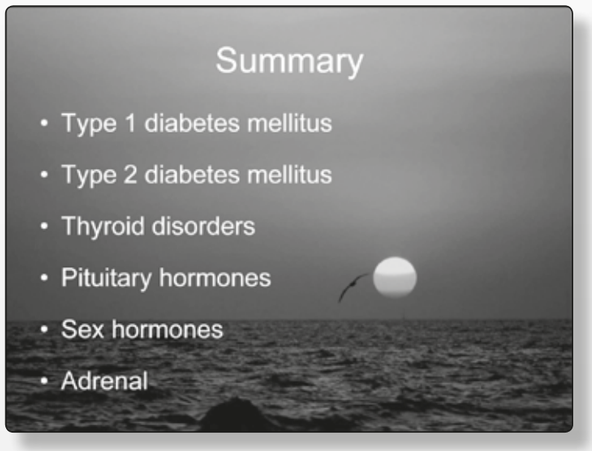
- Organise events at national level with participation of national politicians, including Members of the European Parliament, national associations of physicians and nurse practitioners, diabetes scientific societies, national diabetes associations, as well as national patients associations
- Communicate messages contained in this document during national events and through other channels, targeting dentists, the general public and the governments
- Determine whether other actors could be involved or would be willing to support national activities, such as national associations of diabetes, national associations of physicians and nurse practitioners, national patients associations, etc.
- Consider undertaking research amongst dentists regarding their willingness to offer advice on preventing and managing diabetes to patients (or similar related questions) and/or survey the general public on their awareness of the connection between diabetes and oral health or other similar questions, with a view to publishing the findings of any such survey on 12 September 2014.

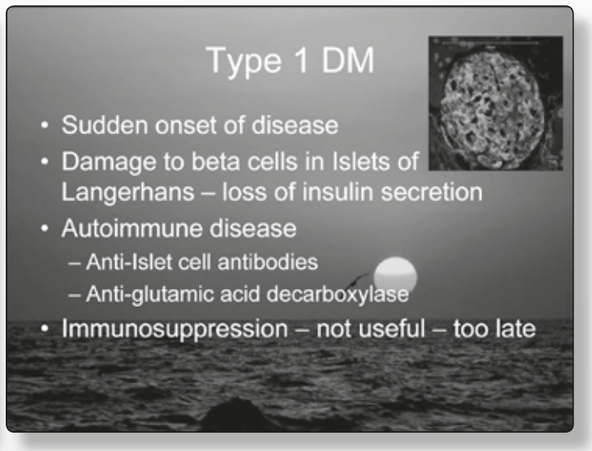
The CED will:

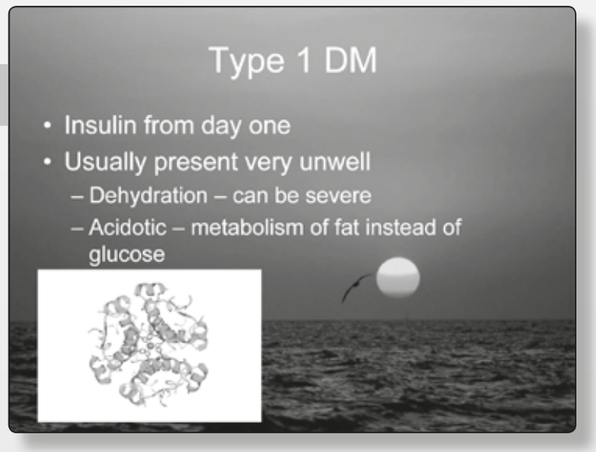
- Distribute the theme and main messages to CED Members
- Encourage CED members to contact and cooperate with various diabetes stakeholders at national level, including public health authorities
- Liaise with diabetes stakeholders at European level in order to cooperate and issue a joint statement/press release
- Issue several press releases in advance of the European Oral Health Day
- Issue a press release on the European Oral Health Day
- Mention European Oral Health Day and main messages in other media (CED newsletters, twitter, interviews/articles etc.)
- Send personal letters to most important players (European Commission (new public health Commissioner and DG SANCO), European Parliament (ENVI Committee), EU Council Presidency) highlighting the European Oral Health Day and related CED positions.

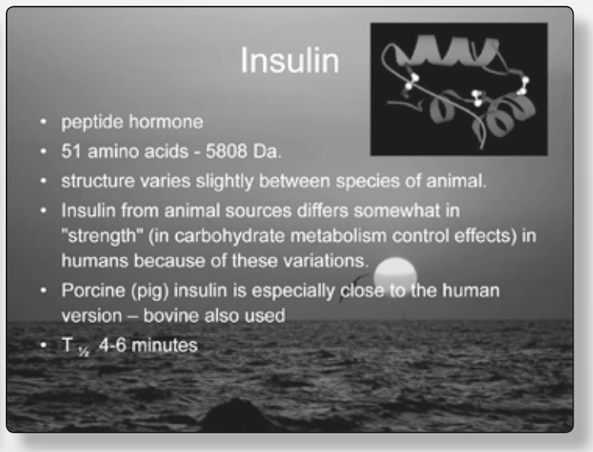
ENDOCRINE CONDITIONS IN DENTISTRY

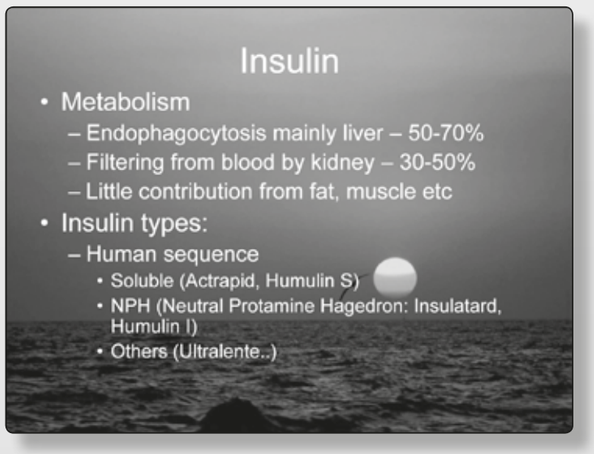
Dr Mario J Cachia

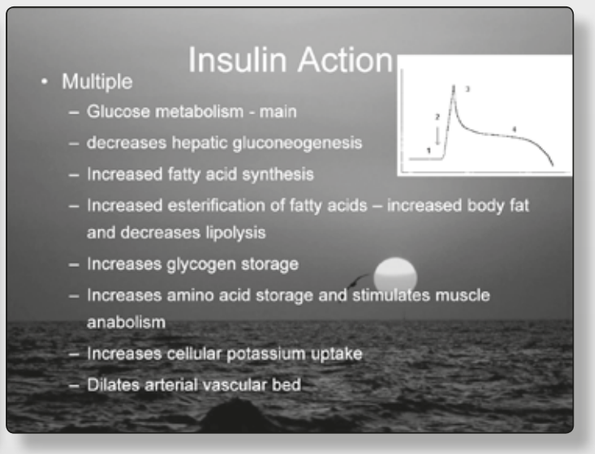












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ENDOCRINE CONDITIONS IN DENTISTRY

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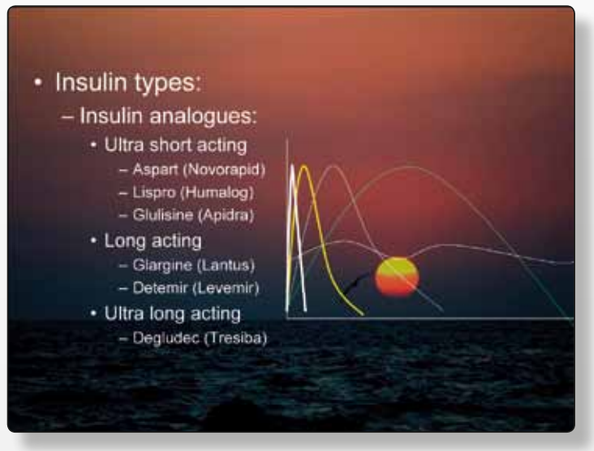

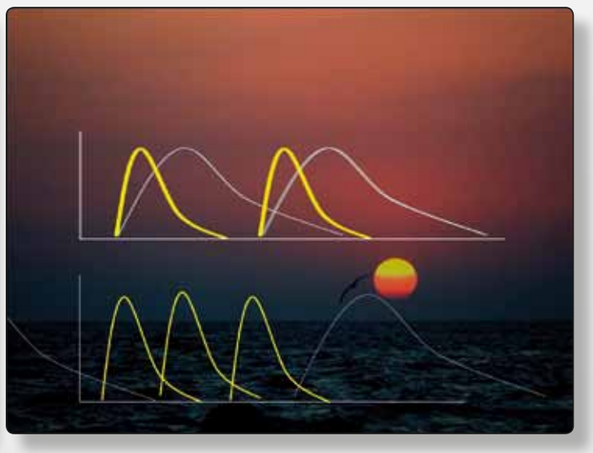

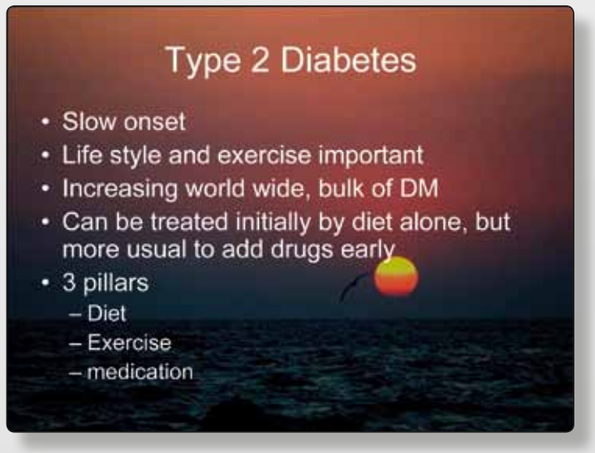

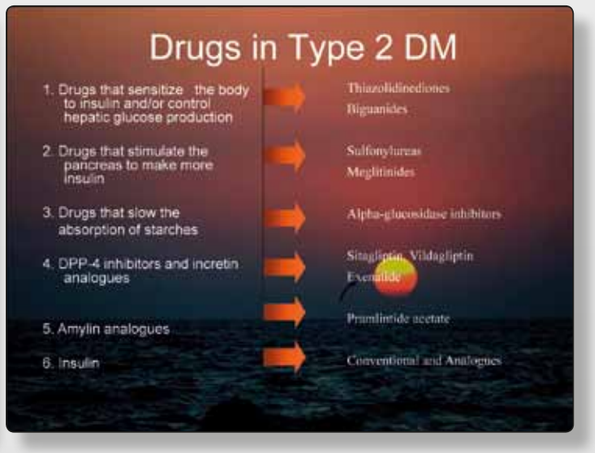

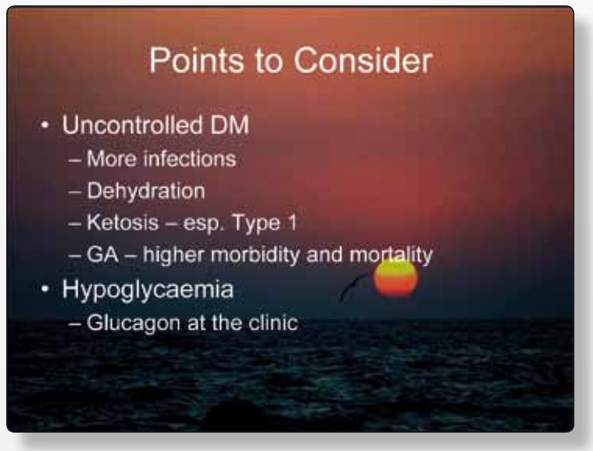

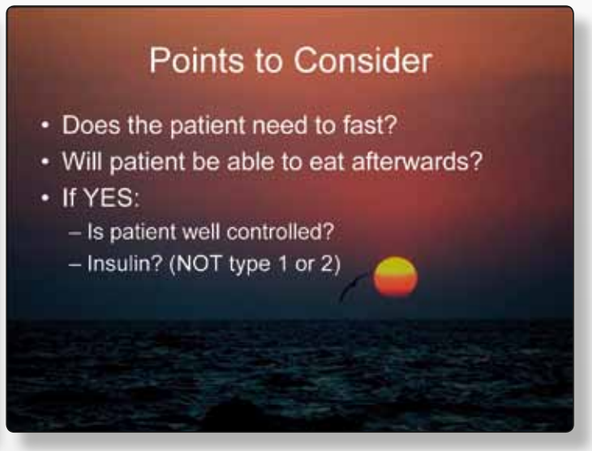

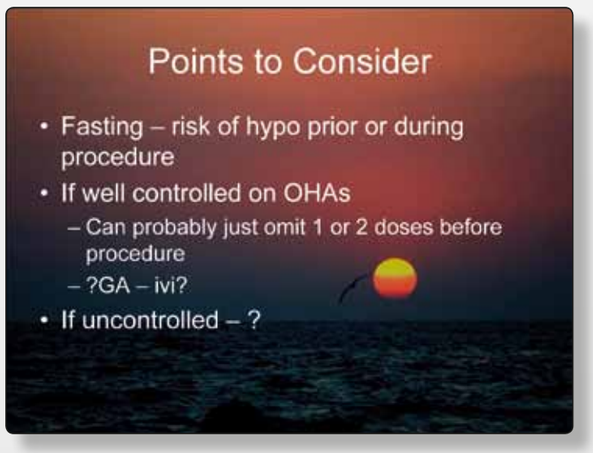

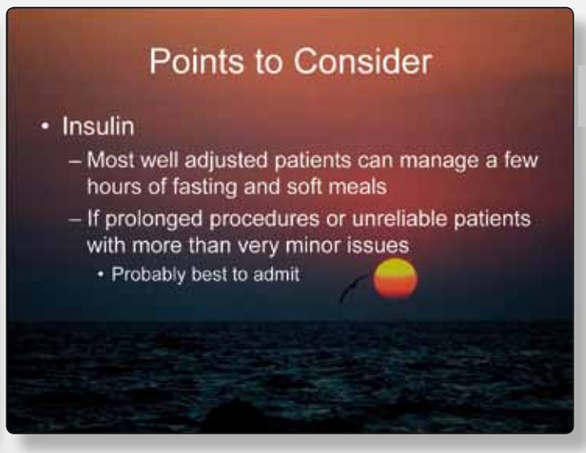

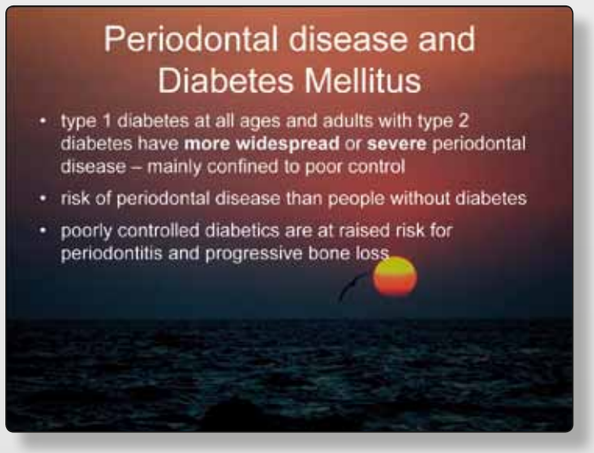

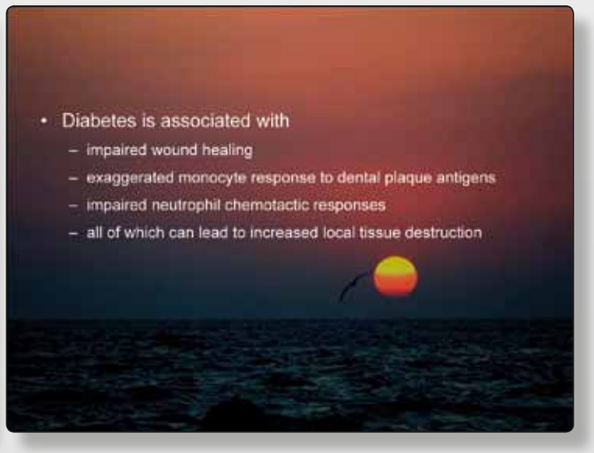

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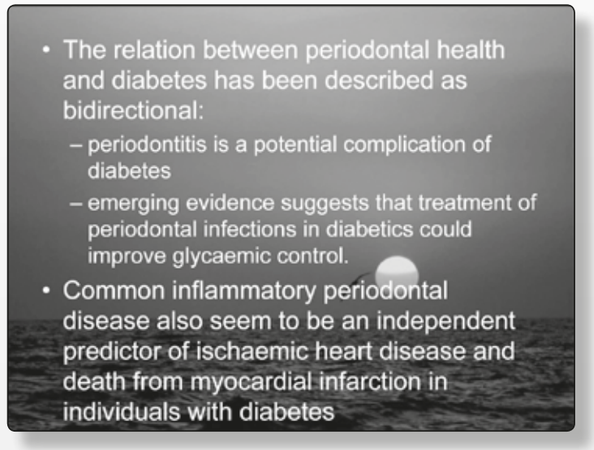
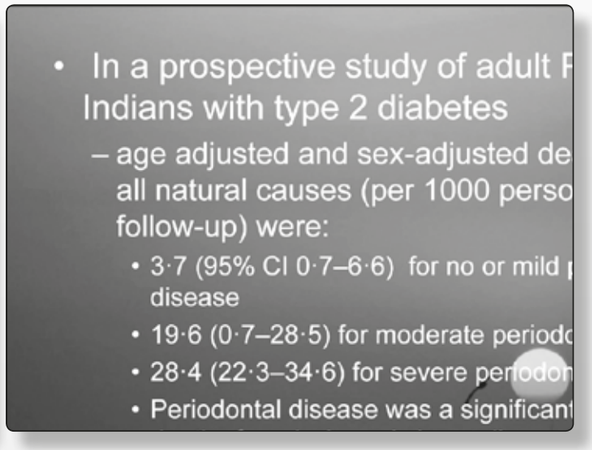
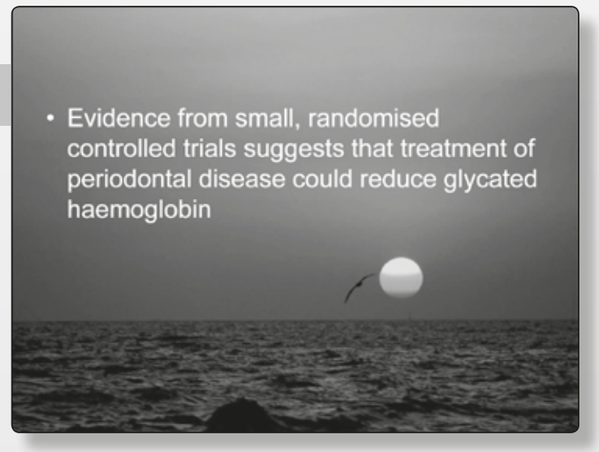
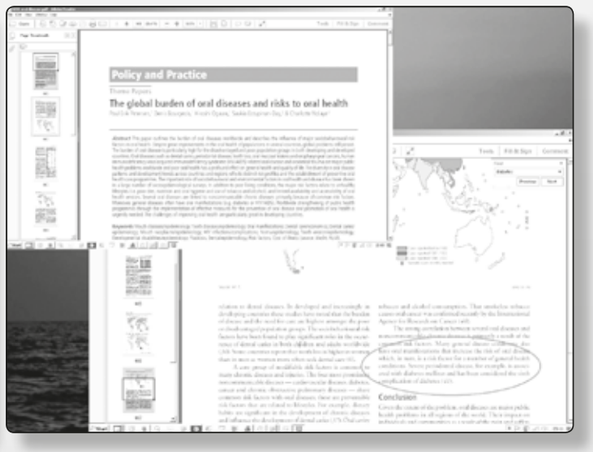
ENDOCRINE CONDITIONS IN DENTISTRY

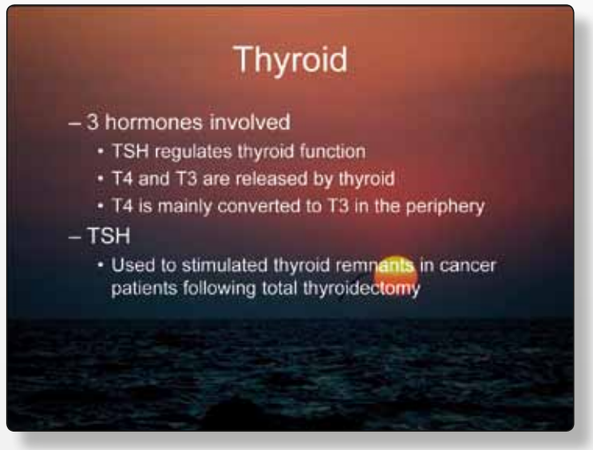
Continues from page 35.

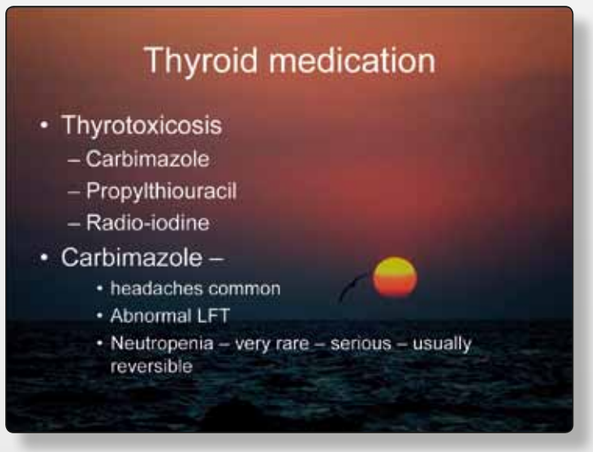


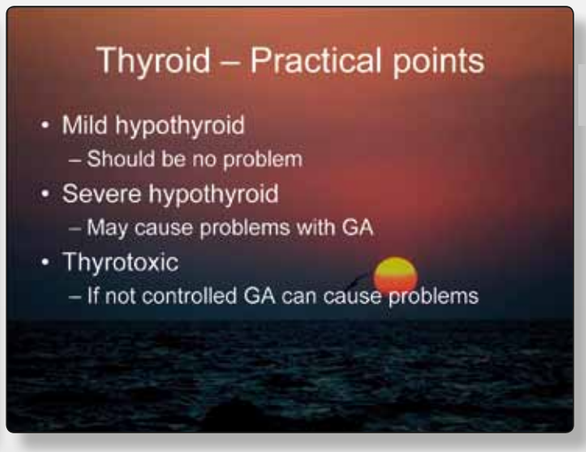


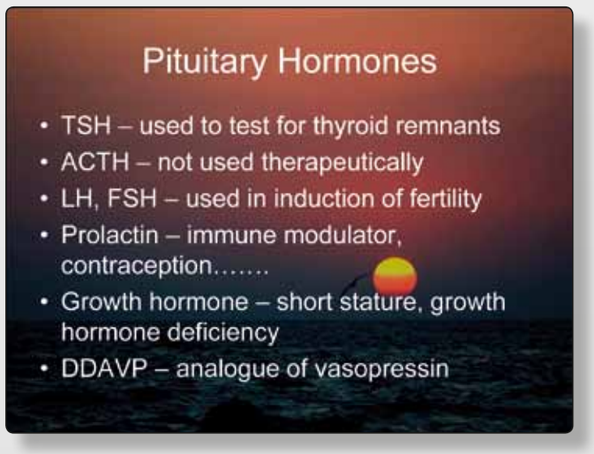












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PAYMENT FORM

Please cut out this section and send with a cheque for 50 euro payable to **Dental Association of Malta** for your 2015 DAM membership – the best 50 euro investment ever!

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_____

_____

ENDOCRINE CONDITIONS IN DENTISTRY

Continues from page 37.

Oestrogen and Progesterone therapy

- Menopause
  - Unopposed oestrogen increases the likelihood of endometrial hyperplasia and endometrial carcinoma
  - Preparations for estrogen therapy and EPT include oral, transdermal, injectable and vaginal formulations. Transdermal delivery systems include patches, gels, sprays, and lotions, while vaginal products include suppositories, creams, and rings.
  - Potential risks and existing controversies regarding high-dose oral regimens
  - low-dose preparations
  - different delivery systems (eg, transdermal patches, gels, and lotions)

Sex hormones and Oral cavity

- Progesterone
  - may affect gum health, increasing risk of gingivitis and tooth decay
- Puberty
  - Microflora and gingival tissue changes
  - Microflora
    - Change with changes in microenvironment
    - Specific changes related to increased hormone levels
      - Gram negative anaerobe - eg Prevotella intermedia E2 and progesterone → Vitamin K
      - Gram negative anaerobes - Capnocytophaga spp. Increases in incidence and proportion
      - Increased gingival bleeding
  - Gingiva
    - Nodular overgrowth and distortion of interdental papillae
    - Inflammed deep red with easy bleeding

Sex hormones and Oral cavity

- Menses
  - Variable manifestations
  - Swollen erythematous gums
  - Easy bleeding
  - Activation of recurrent herpes simplex
  - Aphtous ulcers
  - Swollen salivary glands

Sex hormones and Oral cavity

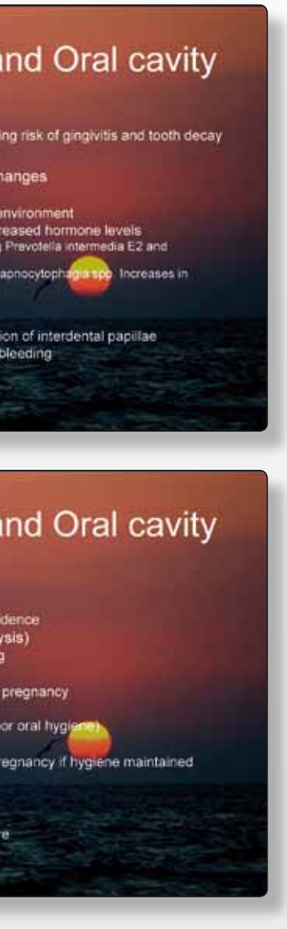
- Pregnancy
  - Caries
    - probably no direct increase incidence
  - Acid erosion of teeth (perimylolysis)
    - Sometimes – repeated vomiting
  - Gingival inflammation
    - Most common association with pregnancy
    - Oedematous, red, swollen
    - Single, tumour-like growths (poor oral hygiene)
  - Tooth mobility
    - Increases and reverses after pregnancy if hygiene maintained
  - Xerostomia
    - Infrequent
  - Sialorrhoea
    - Usually in first trimester, but rare

Sex hormones and Oral cavity

- OCP
  - Exacerbate any inflammatory status of the gums
  - Probably not true anymore with the use of very low dose OCPs
  - Antibiotics
    - Some AB may cause problems
- Menopause
  - Dry mouth, Burning sensations, Altered taste
  - Mucosa my look dry and shiny or normal
  - osteoporosis

Addison's Disease

- Lack of cortisol
  - Absolute or relative
  - Postural hypotension
  - LOC
  - Seizures
  - Death
- Replacement
  - Cannot be missed
  - If unwell will need doubling of dose for few days (includes tooth extraction)
  - If very unwell or vomiting →i.v./i.m.



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