

# THE DENTAL PROBE

A NEWSLETTER BY THE DENTAL ASSOCIATION OF MALTA  
FOR THE DENTAL PROFESSION

Issue No. 27

June 2008





**Perio-Aid Treatment Mouthwash**  
 Disinfection in dental interventions and in periodontal treatment.

**composition:**  
 Chlorhexidine digluconate 0,12g  
 Cetylpyridinium chloride 0,05g  
 Excipient q.s. 100g



**Perio-Aid Maintenance Mouthwash**  
 Antiseptic for daily use. Can be used after treatment phase or as a substitute for oral hygiene when normal brushing is not possible.

**composition:**  
 Chlorhexidine digluconate 0,05g  
 Cetylpyridinium chloride 0,05g  
 Excipient q.s. 100g



**Perio-Aid Treatment Gel-Toothpaste**  
 For patients with orthodontic appliances or implants, for periodontal maintenance and for patients at high risk for caries.

**composition:**  
 Chlorhexidine digluconate 0,12g  
 Excipient q.s. 100g



**Perio-Aid Treatment Spray**  
 Disinfection in hard-to-reach areas (tonsils, tongue dorsum) or in patients with special needs.

**composition:**  
 Chlorhexidine digluconate 0,12g  
 Cetylpyridinium chloride 0,05g  
 Excipient q.s. 100g

# DIFFLAM™

## ORAL RINSE

### BENZYDAMINE HYDROCHLORIDE

... WITH ANALGESIC,  
LOCAL ANAESTHETIC AND  
ANTI-INFLAMMATORY ACTION

Proven in post-surgical patients (n = 13)  
Assessed in a sample of periodontal post-surgical patients,  
Diffiam™ Oral Rinse showed significant improvement  
(compared with placebo), in:

- gingival inflammation
- pain score
- healing index
- plaque index

Proven in community patients (n = 41)  
In a double-blind, crossover study of patients with  
aphthous ulcers,  
Diffiam™ Oral Rinse showed:

- pain relief score  
and
- duration of pain relief  
significantly superior to placebo

61% of patients  
reported at least  
50% improvement  
in pain relief  
after using  
Diffiam™ Oral  
Rinse.<sup>1</sup>

Proven across a range of oral conditions  
Clinical studies have confirmed the efficacy of  
Diffiam Oral Rinse and Spray:

- post tonsillectomy<sup>1</sup>
- in post-radiation mucositis<sup>2</sup>
- in post-chemotherapy mucositis<sup>3</sup>
- in gingival inflammation<sup>4</sup>
- relieving pain associated with aphthous ulcers<sup>5</sup>

Diffiam™ Oral Rinse

- Pleasant taste
- Sugar free
- Doesn't stain teeth

and the only oral rinse with analgesic,  
anti-inflammatory and local  
anaesthetic action.



AVAILABLE ON  
PRESCRIPTION

Effective relief of pain  
and inflammation<sup>1,2</sup>

**Dear colleagues,**

There has been a spring surge in dental activity in Malta, with events organized by DAM, the dental school, dental companies, the University of Malta and other institutions. The DAM dental quiz has become a regular popular feature at our numerous social events, and each one will be published.

The DAM is involved in setting up a centre of medical and dental excellence in the Mediterranean. Professional indemnity and health insurance are currently being negotiated.

If you want to send an article for the Probe please send as an attachment in MS WORD to me at [empire@maltanet.net](mailto:empire@maltanet.net)

Artwork is to be sent by JPG.

If you have not yet paid your DAM membership, please send a cheque for 50 Euro payable to Dental Association Of Malta to The Treasurer: Dr Edward Demarco, 'Solemar, Triq il-Kitarristi, B'Bugia, and enjoy a plethora of benefits, social and educational events, lectures, courses, prestige and camaraderie.

I am listing the latest events. For those of you who missed the lectures I have summarized main points..

Now go forth and save the Nation's teeth.

**DENTAL SPRING EVENTS 2008**

**Thurs 27 March BONDS-STICK TO IT - MR THOMAS WEHNER VOCO EVENT**  
D'Agostinos Valletta

**Fri/Sat 28/29 March Malta Conference for UK Teaching Hospitals for Dental Instructors**

**Sat 29 March ENDURE IMPLANTS IMTEC EUROPE one day seminar, DR Winfried Walzer, Michael Marletta Ltd**

**Thurs 17 April OSPOL IMPLANTS DR GORAN URDE in conjunction with Dr James Galea, WESTIN DRAGONARA**

**Fri 18 April St James Capua Dental Team One Day Seminar at The Palace Sliema Drs Urde, Diacono, Attard.**

**Sat 19 April OSPOL SEMINAR BART ENTERPRISES**

**Mon 5 May DR STEVE SMITH lecture at MFPB**  
'Anterior Implant Aesthetics Criteria For Success' spons. Sanofi Aventis Rodogyl lecture at 8pm with a reception.

**END MAY IMTEC DENTISTS/LAB TECHNICIANS SEMINAR**  
Michael Marletta Ltd

September-lecture by DR Keir Endodontist "Single Versus Two Visit Endodontics Pros And Cons".

**FORTHCOMING EVENTS**

1. 3M LECTURE BY Italian dentist
2. A Rodogyl dinner/lecture event

**Dr David Muscat B.D.S. (Lon)**

---

**SAMPLES AND FREEBIES**  
**By Dr David Muscat**

It was a bright August Sunday afternoon and the sea was most inviting. Since I live directly in front of the sea I decided I would go down for a quick spot of snorkeling.

I descended onto the beach which was blanketed with the towels and tanned toned bodies of hundreds of language students. I went armed with a large bright yellow and green cap which I got free from a pharmacological exhibition earlier in the year. My snorkeling gear I carried in a very large similarly-coloured bag advertising the same drug which I also got from the same exhibition.

As I dodged the razor sharp rocks I heard a friend call me, so I parked my gear near him.

"I like the bag and the cap Dave!" he exclaimed.  
"Thanks" I said, without taking much notice.  
"Dave you sure know how to attract attention!" he added, hiding his head in his Sunday newspaper.  
"Really?" I enquired, as I adjusted the strap of my goggles.  
"Dave that whole group of tourists is looking at us" he said and I could notice a change in the tone of his voice.  
For a good couple of minutes I wondered if the trips to the gym were at last paying off. I looked at myself - surely the six-pack wasn't there yet. I got a glimpse of my bald patch in the reflection from my goggles in the fierce sunlight. I also looked down at the beer-belly paunch.

So, I deduced that those Continental girls were not after my body after all. So what was it?  
"Dave, I get that stuff over the internet and it really works. Do you import it or something? Why do you have it written everywhere? Don't you know what it is?" he said, still hiding desperately under the Sunday Times classified section

I sat on my towel and looked at the massive bag. "For Ultimate Confidence" was written in bold lettering.  
"Its better than Viagra-it's great. Do you have any samples I can have?" he whispered.

I looked down at the sea and there were some elderly people pointing upwards in our direction. I froze. I quickly put on my goggles so as not to get recognized and tried unsuccessfully to cover my bag with my towel.  
'Qieghed nisthi hdejk" said my friend, as he shifted himself slightly away, his head buried in his paper.

I jumped into the sea and swam far out and snorkled

for a good two hours until people started to leave.

When I got back up my friend had left I put the cap in the bag and rolled it up so no one could see. When I got home I looked up the product in the British National Formulary. I found it under "new drugs for erectile dysfunction". I put the cap and the bag in the cupboard in the box room and they have been there ever since.

---

**THE KETAC-CEM MAXI-CAP (ESPE)**  
**An APPRAISAL**  
**By Dr David Muscat**

Having used the Ketac-Cem Aplicap for several years for crown fittings, I longed for a material I could use for bridges, where I would not have to use the light cure, or have to be very careful not to mix cement too thick or too thin on a slab.

A capsulated mix ensures that one does not introduce air bubbles into the cement, so one avoids porosity. I tried the Ketac-Cem Maxicap. The Maxi-Cap requires the purchase of a Maxicap activator and gun, and obviously, the Capmix, or any rotation mixer.

Ketac-Cem is light pink glass-ionomer luting cement in a capsule. A smooth perfect mix emerges from the capsule, and as it is syringe able one can apply the material quickly and efficiently.

The material is expensive, but the flow is beautiful as is the peace of mind. I find the colour pink amusing. One has enough to fill three crowns or a large bridge with three retainers. There is a three minute working time and a seven minute setting time.

One must exercise care when close to the pulp, and not over dry the teeth before cementation. The excess can easily be removed with a carver or a Mitchell's trimmer. The Core Maxicap is the bridge luting cement for the experienced dentist who will not hesitate in spending more for a superb high quality cement for adhesive longevity. The cement of our generation to last a generation.

---

**THE HAZARD OF BIPHOSPHONATES**  
**By Dr David Muscat**

BONVIVA (Bonavia) is a biphosphonate which prevents the breakdown of bone. Biphosphonates are adsorbed onto hydroxyapatite crystals in bone, slowing both their rate of growth and dissolution, and therefore reducing the rate of bone turnover.

They have an important role in the treatment of osteoporosis. They are also used in Paget's disease, hypercalcaemia of malignancy and in bone metastasis in breast cancer.

Post-menopause, Bonviva is administered either by mouth or by injection to counteract osteoporosis. The Ibandronic acid contained in Bonviva can cause irritation of the oesophagus, retrosternal pain, dysphagia or heartburn. There may be a need for blood tests to monitor kidney function and blood calcium levels.

Biphosphonates have been associated with jaw osteonecrosis, usually when IV administered, but osteoporosis has been reported also when taken orally, albeit in an immunologically or medically compromised patient.

The risk tends to increase with poor oral hygiene, dental problems, extractions and oral surgery. A dental examination and any invasive dental procedures need to be carried out PRIOR to starting the Bonviva treatment. The dentist MUST be advised that the patient is receiving this medicine. The drug Bondronet contains the same active ingredient.

---

**COENZYME Q10**  
By Dr David Muscat

COENZYME Q10 is a biological catalyst which works at mitochondrial level. Coenzyme Q10 is a ubiquinone which can be found naturally in the liver and muscle tissues, particularly heart muscle. CoQ10 is important for the functioning of the immune system.

Major dietary sources are meat, fish and cereals. CoQ10 is absorbed less efficiently in the elderly. It thus serves as a food supplement that is non toxic. It is useful in treating heart disease (angina), and periodontal disease. Coenzyme Q10 mops up "free radicals" and is also used as an aid to slimming. In periodontal disease, coenzyme q10 is used in full pharmacological drug dosages. The only possible side effect may be slight nausea.

**ADVERT**

Associate required for an established dental practice with a view to purchase when principal retires Phone 21339464.

**THE SYNOCTA CONCEPT**  
**STRAUMANN COURSE**  
Report by Dr David Muscat

The connection between the screw and the abutment is a 8 degree Morse taper and an octagon.. The conical part is on the inside. There is a non rotation effect through a mechanical lock. An eight degree or less angle will yield a mechanically locking ,friction fit. If inserted with a 35Ncm force it will not unscrew itself (similar to nuts on car wheels) .there is a good force distribution. A conical design confers a large surface area, rather than just contacting on some points. The screw gets no tension in a conical design, as opposed to a cylindrical design, where you can get deformation .

A conical design confers stability against rotational loosening due to friction fit. THE LOOSENING TORQUE IS HIGHER THAN THE TIGHTENING TORQUE. There is resistance against long term cyclic loading. 70-80% of reconstructions are cemented. The OCTAGON allows you to take the impression accurately. Components are either REGULAR (Red) or WIDE NECK (White)

**Impressions:**

SNAP-ON-easier, conventional tray, price, 2 pieces, cannot grind, used anterior zone  
SCREWED -safer, one piece, grindable, need instrument, price, open tray. Both precise and single use.

**AFTER 6 WEEKS**

Remove the cap ,screw in component and take imp open tray. unscrew the screw before removing imp. Red-red colour coded analogue-master cast model . Gmask, articulator. decide which synocta abutment. Use screwdriver to work with all components. PROSTHETIC PLANNING KIT-use with g mask. Silicone key helps to select correct abutment-unscrew cap, clean internal configuration, octagon-hand tight, take imp. reposition same healing cap.

**AT LABORATORY**

Fix analogue g mask master cast  
Concept

- 1 One imp for all cases. No adaptation of provisional needed .Less chair time
- 2 Abutment selection on master cast model. Less chair time, easier planning outside patients mouth
- 3 reliable morse taper connection. all mechanical advantages of anti-rotation device and flexibility . The mechanical connection is on morse taper.

The Synocta Cementable-cannot grind to less than 4mm.

Regular or wide neck  
Never cement the abutment into the implant.

The Plastic Copings—antirotational for single crowns, and round for bridges

#### RULES

1. MINIMAL HEIGHT (min 3mm, ideal 4mm) - for SCREWED reconstructions
2. Plastic component has predefined space for cement of 55 microns, compensation for tolerances. This is a defined minimal space.
3. 6 degree angulation - a predetermined ideal angulation

SUPRASTRUCTURE TIGHTENING TORQUE—screw in by hand and then torque to 35Ncm with torquing instrument, and will not loosen over time.

As there is an octagon, there are 8 possible positions so indexing is used. The technician will only tighten the analogue by hand. There will be a passive fit. block the screw hole with wax or cotton in mouth before final cementing.

ANGLED ABUTMENTS ARE AVAILABLE WITH 2 TIMES 8 POSSIBILITIES AS THEY COME WITH AN EDGE OR FLAT.

The transfer aid is the transfer to the patients mouth to find the correct position. With screwed abutments the screw is accessed laterally. Always use gp or cotton pellets to close holes, or else you will never get abutment out again.

FINALLY:

CEMENTED RECONSTRUCTIONS – TO BE USED WHEN FIRST STARTING IMPLANTS - You need 6mm height minimum. simple with no screws or complications, no microgaps, less bacteria so no bad odour. better price BUT LIMITATIONS as there is a limited occlusal height and cannot use in deep placed implants such as aesthetic zones. due to the difficulty in removing cement excess.

---

**THE MDI AND MILO SYSTEMS INTRA LOCK**  
**THE DR THIERRY GIORNO**  
**HANDS ON COURSE**  
**SALIENT POINTS**  
By Dr David Muscat

#### MDI

1. If you find the bone too easy to drill into, you have a problem. The implant has to be strong into bone from day one—primary stability.

2. You must always leave 2mm of bone between implants.
3. One must use contra angle to place implants, as otherwise you will not have sufficient torque. The max you can put in by hand is 15Ncm. You need at least 40-50Ncm with this system.
4. Flapless surgery is good if you know where the bone is.
5. Mini implants are indicated to replace lower incisors.
6. Composite resin cements are always used to cement abutment to implant eg Denmat core paste. One needs more of a core cement rather than just bonding. With implants you have a very tight connection at margin but a wide gap at the abutment. The composite is the core—the strength comes from the composite.
7. Maxillary implants can be used for chrome retention.
8. 2mm or 2.5mm diameter.
9. Implant is seated when below crest level.
10. Polished collar—no bone loss. Without the polish the thread goes up the gingivae.

#### MILO

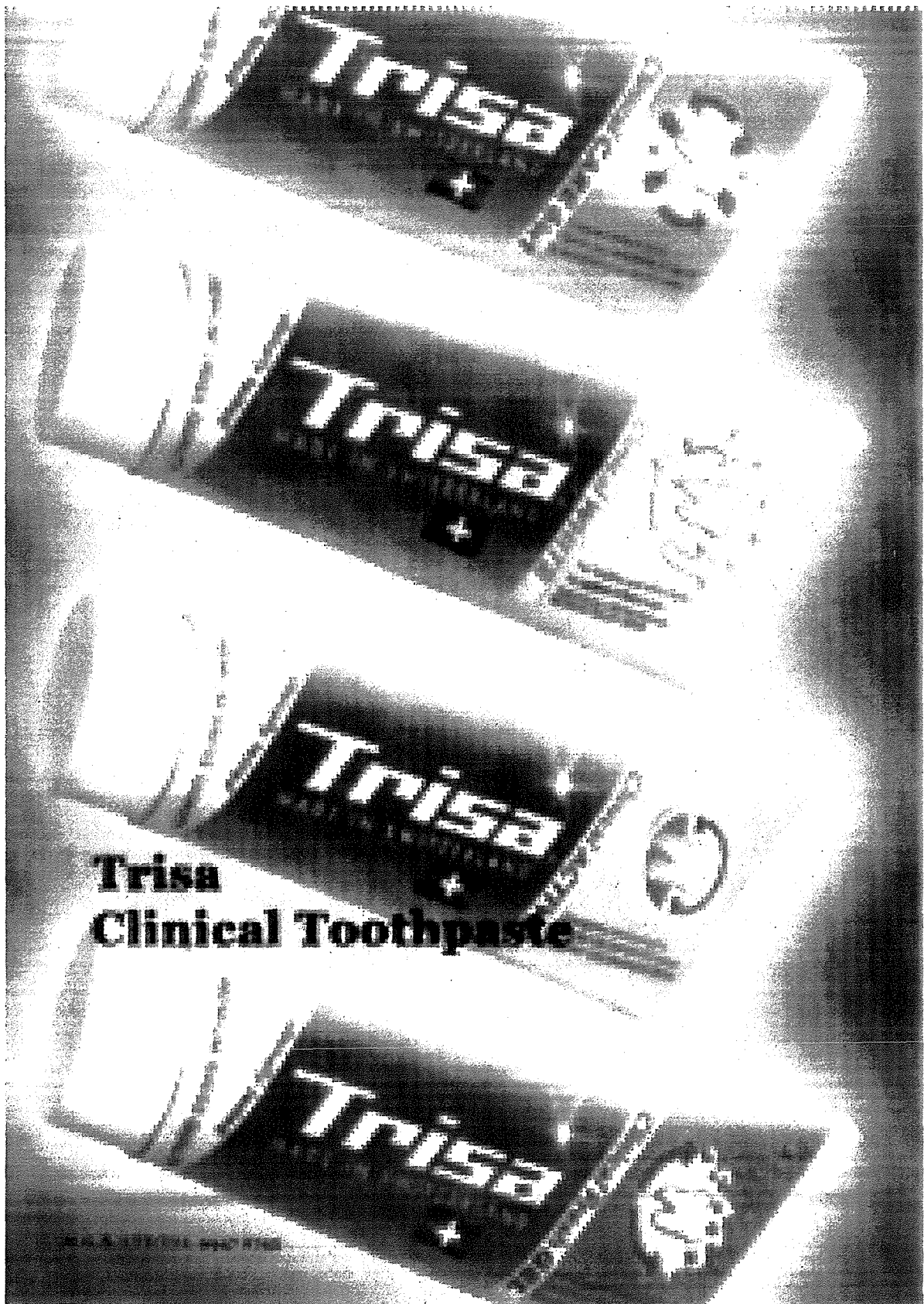
1. Big difference – 3mm wide diameter.
2. Strength is 3 times stronger than Nobel (and fatigue strength 10 times stronger)
3. 2 types—wide and fine pitch. Wide pitch (use in anterior mandible only) has a faster bone turnover. Fine pitch most used.
4. In Milo one uses a pilot drill with a stop.
5. With a wider implant you increase bone compression and have a high initial stability, with no micro movement.
6. Bone types—if your drill comes out of bone with;
  - a. bits of bone on it—type 1 compact
  - b. bone and blood—type 2
  - c. blood that is not compacted on flute—type 3
  - d. nothing on it—type 4
7. The Milo 2 piece implant allows you to prepare the abutment outside the mouth and then cement it. Once cemented it is as strong as a one piece implant, but has the versatility of a 2 piece implant.
8. Can use for
  - a. an upper lateral incisor
  - b. atrophic ridges
  - c. immediate post extraction
9. Healing caps can be incorporated in temporary bridges—for aesthetics.
10. One can use the implant to gently lift membrane of sinus, and gain 4mm bone growth around it.

# carlax®

G I N G I V A L

Inflamed, and bleeding gums





**Trisa  
Clinical Toothpaste**



# elmex<sup>®</sup>, swiss science at its best.

When we created elmex<sup>®</sup> we had one goal in mind: to make a contribution to the long-term dental health. So we only used those ingredients that further this goal. In fact, the amine fluoride found in all elmex<sup>®</sup> products is the result of a collaborative effort between Zurich University's Institute of Dentistry and GABA R&D. What does amine fluoride do and how does it work? Accumulating in seconds on all tooth surfaces, with a slightly acidic reaction, it promotes the formation of a lasting fluoride deposit and inhibits bacterial acid production. The results are high acid resistance and maximum caries protection. Next to elmex<sup>®</sup> toothpaste itself, the elmex<sup>®</sup> family of anti-caries products includes reduced-fluoride elmex<sup>®</sup> for kids, low-abrasive elmex<sup>®</sup> sensitive, elmex<sup>®</sup> dental rinse, a pharmaceutical fluoride concentrate, elmex<sup>®</sup> gelée and toothbrushes. For more information and copies of our clinical studies, please contact GABA International at [scientific.affairs@gaba.com](mailto:scientific.affairs@gaba.com) or visit our home page at [www.gaba.com](http://www.gaba.com).



Distributed locally by: von Brockdorff Imports Ltd. Tel: 21232141. E-mail: [info@vonbrockimports.com](mailto:info@vonbrockimports.com)



---

**DR PETER WARD BOOTH FDS FRCS  
SURGERY FOR FACIAL DEFORMITY  
KEEPING IT SAFE AND SIMPLE**

**Salient points of lecture**

1. Bone dictates the shape of the face.
2. You can treat a congenital defect, but surgery can create its own problems
3. Deformity; Primary-arising in face; Secondary-to abnormalities of the cranium. The face hangs off the skull.
4. **DYSMORPHIC** patients-are normal but they think they have a deformity.
5. Orthognathic surgery is very cost effective, safe and tried and tested over 50 years
6. **LE FORT 1** involves moving the teeth and jaw below the eyes. **LE FORT 11 SAGITTAL SPLIT Ramus Osteotomy**
7. **7. Risk minimization**
  - a. protect corners of mouth during operation with plastic photographic retractors
  - b diathermy of great palatine vessels to prevent bleeding
  - c. care with post-op swelling in geniohyoid and genioglossus area may obliterate airway
  - d. lower implants in anterior mandible may cause dangerous swelling due to bleeding between bone and muscle
  - e. steroids really reduce swelling. Ice not that effective
8. Tipping patient to 45 degrees during operation reduces blood pressure and reduces bleeding.
9. 9. By removing bone at the Pyriform Rim, there will not be a change in the nasal shape, or puffing of the cheeks, if you have changed position of the maxilla.
10. Orthognathic team work is vital. All members of the team have to attend pre op meetings or they do not operate.
5. The limits of camouflage:  
overjet greater than 10mm  
facial height greater than 125mm  
mandible less than 70mm  
pogonium less than 10mm deficient
6. Upper arch expansion is usually unstable in cases of arch width discrepancy
7. In orthognathic surgery one has to make the patient worse first before the surgery with orthodontics ,so then everything fits into place.
8. Vertical discrepancy is a great indicator for surgery as this will usually worsen.
9. Internal detractors used in mandible to be operated by patient to advance mandible
10. The orthodontic link nurse very important member of team-she speaks to patient and co-ordinates everything.

---

**Bonds – stick to it (the instructions)**

**Post-operative sensitivity can be caused by “I know how to bond” attitude**

Ever since the invention of dentine/enamel bonds a revolution has taken place in dentistry. Direct restoration with tooth-shaded long-lasting materials has become possible, and is increasingly preferred over e.g. inlay/onlay technique because of its lower invasiveness. Some countries have stopped teaching amalgam technique in favour of the adhesive technique.

While early bonds involved the use of an etchant, water rinsing and then up to three different bottles, the steps have largely been reduced. Today, self-etching bonds with very short application and placement times are the latest development. And there is a lot of diversity: any depot catalogue easily lists more than 20 different bonding systems from which dentists can choose.

In the meantime, some dentists have 16 to 20 years of good experience with adhesive technique, but not all of them. Adhesive restoration is “technique-sensitive”, i.e. things can go wrong. If the necessary conditions (e.g. an uncontaminated work-field) are not found or created, the result can be less durable than an amalgam filling.

We could also say: the bond is a prima donna who wants it her way, not your way. Deviate from her desires – and she’ll punish you, or rather: your patient, who then complains about post-operative sensitivity, which then costs you money. However, there is a strategy against such woes: read and follow

---

**DR LINDSAY WINCHESTER  
FDS MSC M.ORTH  
‘WHAT TIPS THE BALANCE TOWARDS  
SURGERY’**

**Salient points of lecture**

1. When looking at a patient, also look from behind and above-to check for asymmetry.
2. To predict growth patterns, look at parents and grandparents
3. Computer sequencing is useful in demonstrating to patients the treatment outcomes
4. Treatment options include
  - a. no treatment
  - b. growth guidance
  - c. camouflage
  - d. orthognathic surgery

the instructions for use of the bonds.

Conceded - instructions for use are the least attractive publications in dentistry. They contain the truth and nothing but the truth, since manufacturers are liable for their instructions. Any statement in instructions for use is backed up by hard facts and often costly and elaborate research projects. As for bonds, manufacturers conduct long test series on application steps, their sequence and the application times. Thus, if the instructions read:

*"Etch dentine for maximum 15 seconds, enamel for minimum 30 seconds"*

you can be sure that if you etch dentine for 30 seconds you will not obtain the optimal result, and often post-operative sensitivity ensues (over-etching of dentine is a classic for chewing sensitivity: the smear layer has been de-mineralized too deeply, and the bond disappears in the collagen, thus not covering its surface and not offering anything to adhere to the subsequent composite layer).

You cannot use bond A according to the instructions of bond B: this is the road to failure. If you deviate from instructions, you (not the manufacturer) will have to shoulder the consequences. An attitude of "I know how to bond" for a new bond you just purchased can wreak havoc on your patients and on your wallet.

The most common mistakes with adhesive technique I have seen over the last 12 years are the following:

- Deviation from instructions for use: leads to sub-optimal adhesive results up to post-operative sensitivity.
- No bond applied: more frequent than you may think, especially with unit-dose systems where the assistant cannot see the liquid and thus is uncertain whether the applicator has been properly wetted.
- Curing of the bond with the first layer of composite: never do this! An uncured bonding layer is the most vulnerable thing. The slightest movement with the composite will dislodge it, and then you have unbonded areas. Always cure the bond before you apply any composite.
- Re-contamination of the bond after light-curing: this can be avoided by using a rubber dam, and by applying a fine layer of flowable composite as the first layer in the cavity. A flowable first avoids enclosing air-bubbles, saves time and wets the surface well without the help of an instrument.

Dentine bonds are technical miracles, and so are their packaging systems. Research teams involving half a dozen PhDs in chemistry, testing laboratories with sophisticated equipment and long test series are necessary to develop a new dental adhesive. All this research, often amounting to 6-digit or 7-digit sums, is condensed into this fine-print black and white pamphlet called "instructions for use".

Instructions for use contain valuable information in the true sense of the word. Read and follow them – and profit from it!

*Thomas Wehner Dipl.-Kfm.M.B.A. is an Export Area Manager for VOCO and a frequent lecturer on clinically relevant basics of modern dental materials. With his passion for modern dental material he has become a messenger in the international exchange of ideas and experiences between dentists worldwide. His main research interest is post-operative sensitivity.*

---

**"THE APICAL THIRD  
THE UNKNOWN DIMENSION"  
LECTURE BY DR DAN KEIR  
Salient points by Dr David Muscat**

1. Most apical constrictions are about 0.5 mm wide
2. Apical constrictions may be close to the apex, or open laterally, or may be far from the apex, or may be multiple.
3. The shape of a canal is similar to the overall shape of the root.
4. Oval canals need to be opened up to a circular shape.
5. The gutta percha is expected to fit snugly like a cork in a bottle.
6. The tooth is not rendered brittle by opening up the canals but by the action of cutting the centre of the molar for access. The lever principle kicks in where the cusp becomes effectively "longer", so less force is required to break it. Cuspal coverage restorations are thus important after molar endodontics.
7. One needs to ream sideways also rather than just a filing motion.
8. One needs to work to at least size 40-50 to get the bio-debris out and to flush well with sodium hypochlorite.
9. Canals can be worked to sizes 100 - 110.
10. You need an instrument that cuts just around its tip so that it does not bind on the way down.
11. The instrument has to be nickel-titanium so you can flex it and it can bend around angles.
12. An apex locator is 95% accurate. It is better than a radiograph.

13. For sealing, cut the end off a large gutta percha and place it at end of canal using a thick file. One can use thermaflow to fill the rest of the pulp chamber or else you can use sealant.
14. The original precursor to the Lightspeed rotary system consisted of 22 rotary files, but in the new version there are about 12 sizes.
15. With tapered rotary instruments, the system binds at the inner curvature. However, a system that cuts at the tip will tell you when you have reached the apex.
16. The Lightspeed cuts at 2000-2500 rpm –much faster than the protaper - 350rpm.
17. If you operate the Lightspeed slower, then it may well bind. Lightspeed has been made by Discus dental for the last 3 years.
18. Root canal treatment are best carried out in one visit.
19. Studies have shown that 2 visit RCTs are not more successful, and that a lot of patients fail to attend the second visit.
20. Do not fill in one visit if there is gross infection or if you cannot get canal sufficiently dry.
21. The instrument which cuts at the tip only, will also work the rest of the canal system, and will act efficiently in removing debris and directing it from the apical area upwards and into your suction.
22. The latest tip-cutting rotary files resemble a spade.
23. The tapered system instruments are massive cones compared to the Lightspeed and the former are thus more likely to bind on the way to the apex. A maximum 4 uses per instrument - and then they blunt.
24. The hand files used initially are to be discarded after use. One may need to go through more than one size 8 K file.
25. A crack in a tooth is like a crack in a windscreen- it can only get worse, and patients should be warned about this if you are root filling and crowning tooth.
26. The dentist must ensure a good post - endodontic restoration, as otherwise if your filling fails the root filling will also leak and fail.

#### THE CUCCAGNA QUIZ 2008

1. What other material besides titanium has recently been developed for implant use in the mouth, as it is biocompatible?
2. What is the minimum height requirement for a cemented Straumann implant?
3. What is the ideal temperature to use saline as a coolant during oral surgery?
4. Why should one avoid suturing the floor of the mouth?

5. What is the exact purpose of the blue gel in the Panavia F kit?
6. What active ingredient do topical dental anaesthetics mainly consist of?
7. What sort of margin do you go for with an Empress crown preparation?
8. You cut through the alveolar crest with an implant pilot drill and you note bits of bone on the drill as you remove it. What type of bone is it (ie I, II, III, or IV)?
9. Orally, what is Coenzyme Q10 useful against?
10. What is best-Gamma 2 or non Gamma 2 amalgam?

#### ANSWERS

1. Zirconium Dioxide( bioceramic)
2. 6mm
3. 6 degrees Celsius
4. Submandibular duct may be damaged.
5. To exclude oxygen. Panavia only sets in absence of oxygen.
6. Benzocaine.
7. A rolled shoulder
8. Type I
9. Periodontal disease.
10. Non gamma 2.

#### AUGMENTIN QUIZ

1. What is the amount of Amoxicillin present in Augmentin 1G tablet? - 875mg
2. What is the amount of Amoxicillin present in Augmentin 625mg tablet? - 500mg
3. What is the amount of Clavulanic acid present in an Augmentin tablet? - 125mg
4. What is the function of the Amoxicillin in Augmentin? - bactericidal
5. What is the function of the Clavulanate in Augmentin? - Beta lactamases
6. Augmentin has excellent efficacy against both aerobes and anaerobic oral bacteria? (True or False) - true
7. Augmentin has an excellent efficacy against beta-lactamase producing strains of bacteria. (True or False) - true
8. 100% of bacteria associated with endodontic abscesses are susceptible to Augmentin? (True or False) - not 100 per cent true-depends on what stage
9. The % susceptibility of bacteria associated with endodontic abscesses is much greater with Augmentin than with amoxicillin alone or metronidazole. (True or False) - true
10. What is the dosage regimen of Augmentin tablets? - One twice daily

# Patients

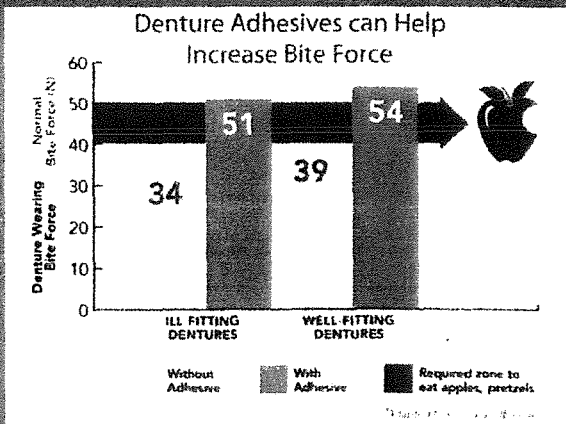


# Confidence



It's a fact – a denture adhesive helps build patient confidence while providing psychological support.

- Adhesives provide patients with added confidence, comfort and improved biting efficacy.<sup>1</sup>
- Improved Bite Force Can:
  - Allow patients to incise challenging foods<sup>2</sup>
  - Help improve stability and retention<sup>3</sup>
  - Help patients look, eat and speak with confidence.<sup>4</sup>



**We consider your patient, our patient.  
Consider our tools, your tools.**

1. Roessler DM. Complete denture success for patients and dentists. *Int Dent J* 2003; 53: 340-345.  
2. Benson D, Robinson RS, Sims TN. The effect of a denture adhesive on the oral mucosa and vertical dimension of complete denture patients. *JSCDA*. 1972; 40:468-473.  
3. Kapur KK. A clinical evaluation of denture adhesives. *Journal of Prosthetic Dentistry*. 1967; 18(6): 554-556.

GlaxoSmithKline Your partner in denture care



# An Innovation in Interdental Cleaning

Cleaning between teeth has never been easier...  
With Proxabrush<sup>®</sup> Click from Butler GUM

*More comfortable handle* with soft grip for better control.

*More sanitary* - because the brush is never touched while loading.

*Antibacterial<sup>®</sup> protected bristles* clinically proven to keep brushes cleaner after use for up to 2 weeks of normal use.

An easier to use,  
more sanitary  
interdental  
system.

**Proxabrush Click**  
interdental brush

Trade Enquiries: BIOSPHERE LTD. - William H. Prescott Street, Tx Glornl - Tel: 21375421



## Dental Symptoms from Strange Causes

Dr. C. Corney MB, BS, DMRD, FRCR  
Medical & Electricity Researcher, Sliema

**Summary:** Two cases of electromagnetic fields causing dental symptoms are described.

**Case 1:** A female patient aged 35 complained of pain in the right mandible which appeared after thirty minutes use of her mobile phone (applied to her right ear). The pain disappeared fifteen minutes after termination of the call. I examined her mouth and temporomandibular joints revealing no abnormality apart from a single symptomless filling in the right mandible. I told her to apply the phone to her left ear. Pain this time appeared in the left mandible with the same features as before. Using my microwave meter, I checked the room in which she used her mobile phone for external sources of microwaves but I found none. I then applied my meter to the mobile phone and mandible whilst she used her mobile phone. A pulsing, abnormally high microwave field of 6.5 volts/metre was observed at both sites on the same side of the head, with a lower mandibular reading of 1.5 on the opposite side of phone application.

As she was a 'heavy' mobile phone user (over 2 hours/day) I advised her to keep her phone well away from her head using either an earphone or car loudspeaker equipment, as well as to cut down the length of her calls. She heeded my advice with consequent permanent disappearance of her mandibular pain.

**Case 2:** Whilst working as a consultant radiologist, a radiographic technician drew my attention to a 48 year old man from the psychiatric unit whose x-ray request stated "fracture of skull - fell out of bed. Schizophrenic - can hear music." The technician said she could hear music too. Examination of the patient's mouth revealed extensive, multiple, dark dental fillings (reminiscent of the 'Jaws' character in the Bond 007 films) some of which were loose. Faint music was emanating from one loose filling - I needed to apply a diaphragm stethoscope to each filling to identify the sound producing one. A clothes check for the presence of mini radios, tape recorders and bedside earphones was negative. Drinking water deadened the music but it reappeared in ten minutes when his mouth had dried. I re-examined the patient that evening, attempting to tune my multi-sound to the same programme emanating from the patient's teeth. Although the amplitude of this was louder, there was now a mixture of several programmes audible. One was certainly a nearby medium wave powerful transmitter and another was in French with one or more unidentifiable programmes.

A dentist removed all the fillings and inserted while replacement ones. The music disappeared permanently and the patient was discharged with no further treatment.

**Discussion:** The electrical mains supply to our houses is labelled 'alternating current' or 'AC' because the current flows in one direction and then in the opposite; inducing an alternating electromagnetic field of force which emanates outwards from the wiring at a speed or frequency of 50 cycles per second (cps) in Europe. However, to reach frequencies above 50 cps, another method of fast cycle generation is used. This is known as 'radio frequency' or 'RF'. The simplest equipment to generate RF is the crystal set. A condenser is connected in parallel across a coil of wire. A voltage is fed from an aerial to the condenser which then shunts the voltage to the coil inducing a current.

The coil then shunts the voltage and current back to the condenser, inducing a constant 'see-saw' known as an oscillation, the speed or frequency of which is altered by adjusting the capacity of the condenser. This constant voltage and current reversal induces an alternating electromagnetic field from the equipment. Inserting audio frequency (about 20 - 20,000 cps) from a microphone at the transmitter into this RF wave produces composite 'modulated' wave which travels miles. In the receiver (crystal set) a unidirectional (voltage and current) limiter (diode) is attached to an earphone which disconnects the background RF wave from the audio wave. This is known as demodulation. The audio wave frequency alone passes through an earphone.

In Case 2, the medium wave programmes detected were on medium wave radio frequencies or oscillations of 1,000,000 cps or so.

In Case 1, the mobile phone generated very high radio frequencies (known as microwaves) or oscillations of two thousand million cps or so. The higher the frequency the greater the penetration of the field into the body

In Case 2, one of the fillings was acting as the diode of a primitive crystal set. We know that these dark dental fillings contain lead amongst other metals. Lead sulphide ('galena') is the original diode (or one way crystal) of the original crystal set, so this explains how that filling was working electrically. The loose filling was acting as an earphone - because the (magnetic) tin component of the filling was responding audibly to the varying voltages and currents going through it. A survey of the literature doubts that a fixed filling can act as an earphone.

However, I have witnessed patients having an MRI brain scan complaining of flashes of light every time the RF wave of the scanner operates so we have to be open-minded about such complaints. In Case 2 the filling was loose, not fixed. A crystal set can operate without a condenser. One of the other fillings is acting as a coil. Hearing several stations at once from the sound producing filling indicates poor selectivity of this primitive radio, which would have improved if I could have connected a wire from this filling to earth! In Case 1 we know that microwaves produce heat (e.g. a heavy mobile phone user often complains about 'burning' in the Eustachian tube). The microwave cooker and radar operate on the nearby frequency of three thousand million cps – so the mobile phone must be regarded as a mobile microwave cooker.

Apart from the heating effect, microwaves cause damage on a microscopic level to the cells of the body. Firstly calcium ions are pushed out of the cells into the extracellular fluid causing temporary but reversible malfunction of those cells. If it is a nerve cell then this malfunction could be pain. The mandibular pain of Case 1 is typical of a nerve pain. It follows the route of the mandibular division of the trigeminal nerve – the upper reaches of which are near the site of application of the mobile phone.

The pain does not cross over to the other side of the mandible – typical of nerve pain. If it is a muscle cell, then muscle pain, spasm or function loss could occur. Pineal cells are frequently involved causing hyposecretion of the hormones serotonin (causing depression and sleepiness in the daytime) and melatonin (causing insomnia at night-time) The pituitary gland can be similarly affected leading to hyposecretion of all the other body hormones and neurotransmitters causing extreme weakness and fatigue. Brain cell involvement leads to complaints of forgetfulness, confusion and difficulties in finding words when speaking. All these changes are reversible if the microwave radiation ceases promptly. The next change is the onset of cell membrane impermeability and eventual disintegration of nuclear components leading to cellular death and non-reversibility of the above symptoms. Other areas which can be affected are the eye lenses (leading to quickly developing cataract), testes and ovaries (causing low hormone secretion and infertility) and skin (histamine released) allergic rashes. Immunity is lowered increasing the risk of development of lymphoma and leukaemia and of acoustic neuroma after ten years of heavy (over 2 hours per day) mobile phone use.

The risk of such side effects increases cumulatively with the daily dose of microwaves. Reducing the exposure time to less than twenty minutes per day and keeping the phone as far away from the brain as possible are the two lines of treatment. As there is no safe lower dose, ideally the microwave meter should register zero when placed next the head. Why do we use mobile phones which operate on a microwave frequency known to be harmful when there other lower safer frequencies which could have been used?

Why have we produced even higher frequency models from the initial 900 thousand cps to 2100 thousand cps when we know that body penetration (and thus side effects and risks) increases with such a frequency increase? The newer digital phone works on a pulsing system which is known also to increase the side effects and risks further. The reader of this article may decide to use, alternatively, an internet phone or a cordless phone, but both of these produce similar electromagnetic fields and risks therefore.

Microwave telephony undoubtedly has great benefits in our lives but my medical practice of evaluating suspicious symptoms from all over the body from such equipment and other electrical items has revealed a downside of ill health which needs to be addressed.

---

#### DR SIMON NORTHEAST

#### REALISM WITH RESIN – A PRESERVATIVE APPROACH FOR AESTHETIC RESTORATIONS

Salient points of lecture by Dr David Muscat

1. The best etching system is the gold standard. First pumice teeth .Then use 35% phosphoric acid etch, wash, dry, apply bonding agent, cure.
2. The NRC non-rinse conditioner (Densply) is next best.
3. There is no difference if you etch enamel for 5 seconds or for 60 seconds.
4. Exercise care when also etching dentine. One must avoid "frosting" as this will indicate that the collagen fibres in dentine have collapsed. In this case it is advisable to re wet the dentine. Do not blow dry or dessicate but have fast suction nearby.
5. When building up composites, one may do so in incremental layers of different colour combinations to achieve a perfect match.eg. Esthet X.
6. Esthet X has difficult handling characteristics and one may need to use artists rubber points to push material and artists fine brushes dipped in bonding agent to flow material .This also reduces

the chances of air bubbles and porosity. You need to discard the points and brushes after each use. These composites are difficult to finish and polish.

7. When building up anterior teeth, the dentinal layers are added on with a shade darker than the final desired shade first at the base. The one applies the actual colour, and the layers of enamel etc. There are systems with combinations of hue, chroma etc
8. The 'ring flash' is good for photographing soft tissues and full arches. It is good for oral surgery and pathology.
9. The "twin flash" is better for photos of individual tooth shapes and contours as there is less glare and reflection. The light is more uniform from both directions. The only snag is that you have to adjust their position every time.
10. When building up anterior teeth you first over-build at the amelo-dentinal junction. This increases your surface area for building up the tooth.
11. The real colour of a composite build up on an anterior tooth is only evident after a couple of days when the tooth has been sufficiently wetted and rehydrated.
12. It is best to judge a colour against a black background.
13. There exists a 'bridging' composite to use between enamel and dentine for anterior teeth.
14. Polishing strips can be used anteriorly to remove enamel and create space for the malar strips.
15. 3M self/dual cure materials are good for fillings in deep class 11 cavities.
16. One may bleach teeth anterior teeth palatally by using reservoirs on the models when making the bleaching trays. Eg. when there are old veneers on labial surfaces of these teeth.
17. Silicone indices can be used to guide the operator in the clinic. The study models are made and the teeth are built up to the desired height and shape. One can use old expired composite from the back of your drawers for this purpose. Then a silicone index is made on this. You can also produce a crown form on this model to help you build up the tooth clinically to the desired pre planned shape. eg use in class 4 build ups or building up laterals or changing canines to look like laterals.
18. Concise is still produced today, albeit one shade. It goes yellow in two years.
19. With class 4 composites you can prepare a 70 degree chamfer. The proximal walls are prepared to a butt joint.
20. The 'etch and bond integrity under a fitted crown is crucial to the survival of the pulp of the tooth.

## BONDS STICK TO IT

by Mr Thomas Wehner

Sensitivity – salient points of the lecture

Summarized by Dr David Muscat

### Main Causes:

1. Treatment errors
2. Change of load
3. Bleaching
4. Infection
5. Open tubules

### Pain Sensitivity

#### 1. While Chewing

Excessive etching resulting in hydraulic effect in dentine

Insufficient penetration of bond into hybrid layer

No bond applied/contamination of bond layer

Enclosures of air bubbles between bond and composite

Incorrect adjustment of occlusion

Contact point too tight

### Use of flowable resin at Base Class 2 Cavity

- Little amounts of composite cured at 10 secs better than large volumes cured for longer times
- No instruments needed. An instrument can scratch composite.
- No air bubbles
- Introduction of a stress breaker.(Cfactor)

The C FACTOR (Univ Amsterdam) results in less shrinkage. In a class 2 cavity there are 5 sides to the cube with shrinkage on top side only. This is 5:1 so the C factor is 6. In a class 5 cavity the C factor is only 1.

Bulk filling of a class 1 is never a good idea. However, if you introduce a flowable resin first, you have a HARD HOLLOW BODY. This has a strength of its own. So, polymer shrinkage is subsequently transferred to this body and not the tooth.

### The white line in a Class 1 Cavity

This is due to cracks in the enamel prisms. The line is seen after polishing when it gets filled with dust. - *If you cure large parts at a time you lose 75% of bonding strength.*

**Light Curing - This should be by Halogen or led light not plasma light.**

The yellow powder absorbs blue light. There is an amount of energy that has to be reached either by high intensity with short exposure or low intensity with longer exposure. With the light there is a delay between curing of layers.

A good test for your light is to shine the light down a full tube of composite. Squeeze it out and you should have 4mm fully cured.

With the laser, the photoinitiators activate all parts of the filling at the same time. Photoinitiators release an electron. 50 electrons open 50 double bonds. Then another 50 electrons are released which open up another 50 double bondsets. High intensity curing is not a good idea. A soft start cure is better. It is best. If you have a high intensity cure to approach the tooth slowly with the light for the first 5 seconds to allow this process to take place. High intensity cures result in brittle fillings.

Contact points should be checked with floss. Teeth are locked mesially whilst chewing do not make them too tight.

## 2. Sensitivity – Constant pain after filling

If not periodontal then consider:

- New Load.
- Matrix/Wedge
- Grinding/Trauma
- New contactpoint/occlusion

### Constant Pain-bleaching

Due to supply of OH ions.

A frequent side effect

High risk H2O2 concentration and use of lights

Bleaching comes from OH ions not from light

Exposed cervical areas must be desensitized before bleaching. The OH will penetrate through the fluoride.

It is best to use a home kit for bleaching. Most of the effect is in first 2 hours and then it tails off in the second 2 hours. There is thus no advantage with all night wear. Also patient may bite through guard at night. It is best to have a controlled whitening – patient comes home in eve and has dinner, brushes teeth and applies trays for 4 hours and removes before sleeping. This is best regime. The frosty appearance with power bleaching is due to dehydration of teeth. The glycerin dehydrates tooth. A good bleaching agent has moistening agents the tooth needs 2 weeks to stabilize. In the future tooth bleaching will be part of every treatment plan. It is best not to do adhesive dentistry immediately after bleaching process as the tooth still contains active oxygen.

## 3. Pulsating Pain

Pulpitis

Grinding

Reaction to residual monomers

RCT/anti inflammatories

Do not overdry dentine - If necessary apply distilled water to it, or place a little sponge of water in cavity while you etch enamel around it.

## 4. Pain on locally not connected teeth

Systemic

Further diagnosis

## 5. Pain on food/drink

Low Ph coke, fruit juice

## 6. Pain drawing in air

Case for desensitisation

GLUMA, BIFLUORID seals tubules hypersensitivity stops.

## 7. Pain on temperature change

Open tubules

Cavity or abrasion

Thermal expansion rate of restoration varies from that of tooth.

Use an ORMOCER - based restoration, or GIC. A nano-hybrid restoration has low shrinkage. It is tooth-like.

NB An amalgam filling causes a lot of stress at centre of a large MOD. The amalgam is strong and will fracture one of cusps. FUTURABOND DC IS good as it is self curing. Coimediator-acidic this imitates Polymerisation from the bond.

Varnishes:

This is the last step after fillings done.

- Duraphat NaF  
Bifluorid suspension NaF +CF2
- Resin based (risk residual polymer)
- Orcomer based (cure fully)

After Crown Preps-ways of avoiding sensitivity

1. Cover crown prep in pure calcium hydroxide (CalciCur) for some minutes and then rinse away.
2. Use a calcium hydroxide-based temporary cement (eg. ProvicolQM) for pulp protection
3. Use Bifluorid 12 on tooth and then brush away top layer before applying final cement.

### NOTABLE QUOTES

1. The most satisfied successful composite users over 20 years all around the world had one thing in common, even though they all used different composites - THEY ALL USED RUBBER DAM
2. A calcium hydroxide lining under a filling is only indicated if the pulp is almost visible at floor of cavity.
3. In the mouth, whatever you do there is always a risk of infection to the patient .
4. There is no such thing as a "fast light" - the speed of light being what it is.
5. The best way to get used to rubber dam is to teach your nurse to do it for you.
6. The "sandwich technique" with glass ionomer under a composite has been superseded by the advent of the flowable composite .
7. The most dangerous place to get an air bubble is between the bonding agent and the first layer of composite. Using the flowable resin eliminates this risk. Bubbles above the first composite layer are not so critical.

**THE IMTEC SEMINAR  
IMPLANTATION AND BONE AUGMENTATION  
ENDURE MINI DENTAL IMPLANTS**

**MARLETTA ENTERPRISES LTD**

*Salient points by Dr David Muscat*

Only 10% of teeth lost in Germany are replaced by implants. The implant surface is only one part of a complex system that makes osseointegration possible.

**CRITERIA**

1. Bone anatomy
2. Age and expectation of patient.
3. Financial restrictions

Mini implants can be used to stabilize a full denture while the permanent implants are being made. Also, the immediate denture and minis cover the wound whilst sitting on the MDIS. To remove a mini implant, you can simply unscrew as it is purely round and you may remove it with a ratchet wrench as there are no vertical slots in the implant.

**ENDURE**

1. A very strong thread
2. Good stability especially maxilla
3. A bone tap is required if tough bone is present
4. One prosthetic platform
5. Parabolic
6. All prosthetic parts interchangeable
7. Reduced microgap
8. All coded
9. Surface sandblasted and acid etched
10. Sterilised by gamma radiation
11. Conical cylindrical self tapping implant
12. Unique triple micro threading preserves cortical bone at the crestal ridge by reducing stress on the bone.
13. 1 mm polished collar

A locator drill is used to mark the crestal bone so you do not slip on bone when you use the pilot drill. An osteotome is used to tap bone when close to sinus. The mandible has strong cortical bone. Prepare up to three quarters of the way and then thread into it with implant. The implant comes with a plastic driver which makes it easy to place. With immediate extraction and implantation, always go a bit lingual so you do not perforate the buccal plate. Use 40 Ncm and it will be stable and heal.

When you extract the tooth measure its width buccally and anteroposteriorly and you can gauge which size implant to choose. When there is a dehiscence use artificial bone. You should perforate the bone to get bleeding because this is imperative for healing to take place. Use a membrane and/or titanium tacks which clip onto an instrument and tap them into the bone with one firm tap, warning the patient beforehand. Use gortex or nylon sutures. PTFE sutures are good.

ENDURE comes with comfort caps with a margin 1mm below the gingival. On the model you will use a flexible

gingival mask, as the technician does not section the model and needs access around the subgingival areas. Always get the technician to slightly undercut your crown on the lingual margin in case you ever have to remove it.

MERON PLUS -VOCO is viscous and thixotropic (does not run in water) and is used for implants. Thin galvano gold is sometimes used.

**IN THE UPPER ARCH, FOR AESTHETIC REASONS, ALWAYS GO FOR A REMOVABLE PROSTHESIS OVER IMPLANTS -AN OVERDENTURE TYPE.**

**MINI DENTAL IMPLANTS MANDIBLE**

1. Only 10mm bone height and 4mm bone width needed
2. 90 mins operating time
3. 4 MDIs in lower between foramina
4. Cost 350 euro times four plus denture adjustments
5. Bone height retained due to presence of implants
6. Tissue supported/implant retained
7. 97% success rate
8. Chewing function improves immediately

**MINI DENTAL IMPLANTS MAXILLA -**

Do not rush it

1. 6 Minis
2. Place soft liner first with a hard pick up after 4-6 months, and the progressive removal of the palate on the upper denture so as to add the load to implants gradually.
3. Sinus floor can be perforated 1mm-2mm
4. 2.4mm max thread MDI ideal for softer bone
5. 91% success
6. One cannot get 40Ncm torque in the upper as the bone is different

When using the pilot drill and also the ratchet wrench it is important to use both hands. The top of the head of the wrench must be supported with your thumb. You must feel the bone quality as you cut and as you turn.

**LOWER IMPLANTS**

1. With MINIS it is transgingival, with no flap required.
2. In lowers -Immediate loading concept. Retrofitting at the chairside. A soft loading concept
3. 30-40 Ncm stability
4. Average 30mm length
5. 4 implants
6. Cost effective
7. Affordable

Around the heads of the implants after implants in positioned and heads in place one can use SECURE pink acrylic material which flows well. *When using Mini Implants as a permanent single tooth replacement use an upper mini FOR THE LOWER.* Use a square head and always splint the tooth with the adjacent lower incisors using flowable composite. At first so as not to take too much load immediately on it.

When using MINIS as a supplement to permanent bridge implants or to support temporary fixed bridges in either arch, always use a combination of round o ball and square heads as otherwise you will have a problem with parallelism. When cementing an implant always use one with a collar.

# Acid Erosion. Exposed.

## Evolving challenges in oral health

One of dentistry's many successes is to have reduced the prevalence of caries and periodontal diseases, extending the longevity of the natural dentition. Infectious diseases have given way to a spectrum of degenerative conditions, one of which is the multifactorial challenge of tooth surface loss.



Changes in lustre and texture and increased translucency are common signs of acid erosion

## The healthy diet paradox

Tooth wear has much to do with the modern, health-conscious lifestyle. Diets today are often high in acid from sources including certain soft drinks and fruit juices. These demineralise and soften the tooth surface making it more susceptible to physical damage and tooth wear. Acid erosion is normally an insidious process, often only highlighted by clinicians when restorative dentistry is indicated.

## Early intervention is key

Increased awareness at routine examination added to lifestyle advice may help prevent sensitivity, changes in colour and tooth shape; and ultimately the need for major restoration.

## Expert advice is now available

As awareness grows, acid erosion is featuring increasingly significantly in the management of long-term dental health. With this in mind, product innovation and public education are high on our agenda.

Recognising the early stages of acid erosion can be as simple as switching on a light. For expert guidance on signs, symptoms and management, visit [www.aciderosion.com](http://www.aciderosion.com)

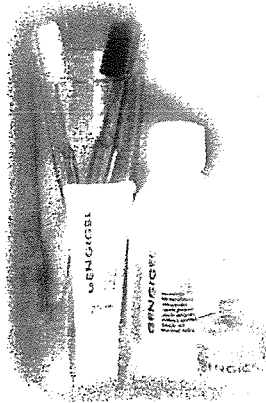


**MOUTHRINSE**  
HYALURONIC ACID  
0,025%

**GENGIGEL®**

**GINGIVAL GEL**  
HYALURONIC ACID  
0,2%

**FOR HIGH QUALITY CARE OF YOUR MOUTH AND GUMS**



TO ASSIST IN THE TREATMENT OF

GINGIVITIS  
PERIODONTITIS  
LICHEN PLANUS  
MOUTH ULCERS  
RECEDING GUMS  
GENERAL ORAL MAINTENANCE



AVAILABLE AT LEADING PHARMACIES.

DISTRIBUTED EXCLUSIVELY BY: **DRUGSALES**

RUSSELL BUILDINGS, NAXXAR ROAD, LIJA.

TEL. 21419070/1/2

INFO@DRUGSALESLTD.COM

**SOME COLOURFUL EXPRESSIONS BY PATIENTS IN A RURAL DENTAL CLINIC**

- Dott, ghandek toilet, ghax maqsum?
- Ghax l-oggett, tiehu hsiebu, jiehu hsiebek hu.
- Meta jaqbad mieghek, jaqbad mieghek
- Fl-ahhar mill-ahhar, trid tigi ghas-sikkina.
- Ghax bhalissa, " broke".
- Kemm tiehu, ghax jien ma tantx ghandi minn fejn?
- Ghal ruhek, u ghall-mejtin tieghek.
- Int idejk taz-zokkor dott.
- Ma tantx nahsillhom, xi darba fix-xahar, imma illum hsilthom, ha!
- Dott, minghajr loppju tiehu anqas?
- Skuzani, imma tellajt bila-ma jimputax hux?
- Ghandi l-istonku mqalleb illum, ma nafx ghaliex, u nahseb nirremetti fuqek.
- Kemm hu hazin il-bleach li dahhaltli go halqi.
- It-tifia skuzi halqa tinten.
- Tmisslix il-gerzuma pliss.
- Dik iz-zikk ta darsa swietli sittin lira
- Kemm nafek dott?
- Mela ahna paci.
- Il mara ma felhitx bl-ugieh, u sewwa jghidu li d-dubbien iduru ghall-hmara maghkusa.
- L-ahhar darba qsamtai minn gewwa bil-prezz.
- Ma kiltx fuqha, forsi xi daqsxejn hobz tal-Malti. B'daqshekk?
- Ghamilt lejli fil-loki b'dawn l-imberkin antibiotics.
- Jien allergiku ghall-penicillin, imma Augmentin niehu.
- Kissirtha fuq ghadma tal-fenek. Ma kienx siegha u mument!.



## Malta Institute for Medical Education

### *A focus on excellence in the middle of the Mediterranean Sea*

**Mission Statement:** *“to accelerate the diffusion of best evidence-based medical information and to foster interaction and discussion among healthcare providers using the latest information technology”.*

The Malta Institute for Medical Education (M.I.M.E.) is a new concept for an international teaching institute created to promote postgraduate medical education in Malta. In putting together an international faculty, a team of established local academics have invited international authorities as well as prominent expatriate Maltese lecturers in all medical disciplines to collaborate together. The academic content will include formal didactic courses, but also skills courses, as well as workshops, seminars and masterclasses. M.I.M.E. will also be hosting a virtual academy supporting online training.

M.I.M.E. is perceived by its promoters as a growing cluster of medical knowledge facilities, multidisciplinary medical, dental, paramedical, and pharmaceutical.

It addresses the needs of these other allied professional groups. The services offered by the Institute will not be limited to local graduates, but will be extended to countries in the Mediterranean basin, as well as North Africa.

Strategically, Malta is well placed as a location for this centre. The proposed Institute will be the only one of its kind in Southern Europe and North Africa.

The fact that it will be located in an English-speaking country which is safe, within the European Union and therefore politically and economically stable, with a wealth of history and culture, and enjoying an excellent maritime climate, renders it all the more attractive and unique.

#### **MIME's Charter**

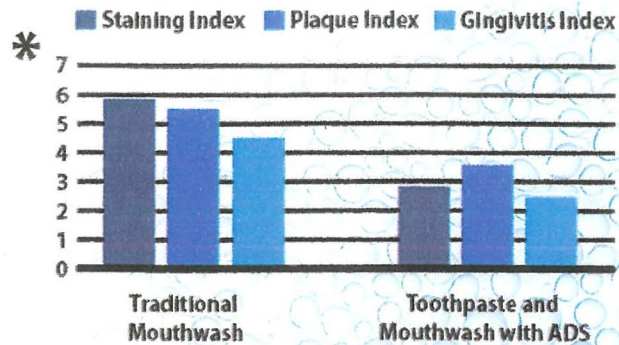
- Commitment towards promoting medical education in support of improved public health programmes.
- Commitment towards providing reliable best evidence-based information in support of effective clinical decision making.
- Fostering useful debate and interaction between professionals.
- Commitment towards helping to bridge the divide between countries enjoying the best in healthcare education, and those deprived of access to updated medical information.
- Commitment towards the dissemination of medical knowledge among health care providers using the latest IC technology.
- Providing health technology information to prepare for the requirements of an increasingly IT based clinical practice.

#### **Conference Venue**

The Mediterranean Conference Centre is the former 'Sacra Infermeria' of the Order of St. John of Jerusalem, one of the most imposing buildings in Valletta. It is located adjacent to Fort St Elmo and overlooks the Grand Harbour. Since its inception as a conference centre, an ongoing restoration and maintenance programme has kept the unique historical character of this national monument, while providing a modern venue able to handle major international conferences, exhibitions, banquets and theatrical events. The MCC, the flagship of conference venues on the Island, is now renowned for its outstanding services and facilities.

# Still prescribing the "normal" Chlorhexidine?

## CURASEPT with ADS 0.12% Chlorhexidine Mouthwash and Gel Toothpaste



**Combined use of the Gel Toothpaste and Mouthwash will guarantee optimal therapeutic performance.**

**Chlorhexidine used in combination with any conventional toothpaste or any other non-Gel toothpaste will inhibit the activity of the Chlorhexidine, making the treatment ineffective.**



Available in all Leading Pharmacies. For more information please call on +356 21437415.

Exclusive Distributors



\*Comparative evaluation of the ADS System in periodontal Patients  
L. Bellia, C. Seria, M. Amato, A. Liano - University of Naples.