

The Dental Probe



**MAGNIFICATION
IN DENTISTRY**

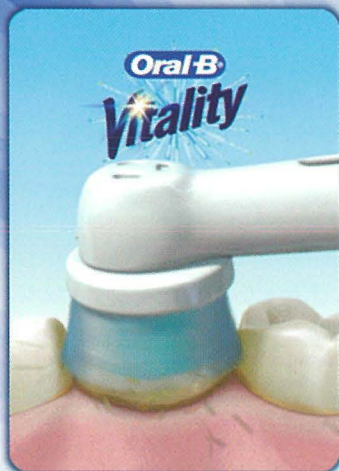
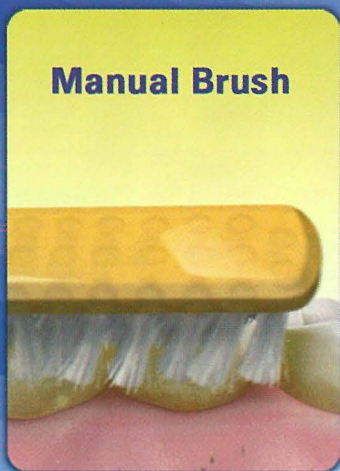
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Editorial

DENTAL ASSOCIATION OF MALTA

The Professional Centre,
Sliema Road, Gzira
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By Dr David Muscat

Dear colleagues,

We have had a whirlwind of events in the last 3 months and every week we add on more. On the right is a list of events organized by the DAM in conjunction with our sponsors. (Correct at time of writing article).

Most events were co-ordinated by Dr Lino Said and I. Organizing events takes up a lot of our time. I am very grateful to Lino for his input. Together, the effect has been logarithmic.

The DAM has negotiated rates with GO and HSBC on your behalf. You have the opportunity to save a lot of money and to be treated as top notch customers whom we all deserve to be. NnG promotions will give 10% discount on DAM group bookings for any of their concerts and events as a 'DAM group booking'. Contact Dr Lino said for more details.

Please note that the opinions and statements made by the contributors and advertisers in the issue are not necessarily those shared by the editor or by the Dental Association of Malta.

Many dentists ask why we organize so many events. The answer is simple my friend. Because we can – we shall. We will. We are the DAM.

David

LATEST/PLANNED EVENTS

22 APRIL

Maritime Museum lecture on *The Travels Of Don Ignatio Mifsud* by Mr Liam Gauci curator followed by a dinner at Don Berto restaurant Vittoriosa kindly sponsored by Pharma M.T. represented by Mr Marco Manara.

23 APRIL

Phillips.Sonic Care Brush 2 launch madliena cottage – Bart

6 MAY

Rodogyl lecture and dinner – Palace Hotel – Sanofi Aventis

8 MAY

Cuccagna dinner and DAM quiz – pro health

11 MAY

Voco lecture and reception – MFPB – Page Technology

14 MAY

Prof Aimetti – Periodontology – MFPB GSK

19 MAY

Dr Eirik Aasland Salvesen – San Gorg – Nobel Biocare – Cherubino

20 MAY

DAM wine tasting Farsons Direct

28 MAY

POLA and RIVA launch at Westin – Bart Enterprises

5 JUNE

Vinum Cultural Lecture by Liam Gauci, Curator of Maritime Museum with presentation and reception by Abbott – V. J. Salomone

11 JUNE

Fittydent Westin lecture /dinner – Pharma MT

17 JUNE

Catafast – Lecture by Dr Adam Bartolo on pain management – Intercontinental Hotel – Novartis

24 JUNE

Fenkata tac-Cnus, Zebbug with DAM Quiz – Noprilam

25 JUNE

Zhermack lecture and dinner D'agostinos – Page Technology (Same day hosting of Slovenian dental association for lecture/lunch.)

1 JULY

EGM – Language issue and sterilisation and radiographic regulations at MFPB – Reception with Café Jubilee catering and fine wines sponsored by GO who present package to DAM

15 JULY

Myofunctional Lecture – Bart

25 JULY

Three maxillofacial lectures / reception at Dolmen sponsored by Bart Enterprises in conjunction with Dr James Galea

END SEPTEMBER

Lecture by Collis Williams (Oki, Aloclair Oral Medic)and reception at hotel to be announced

16 OCTOBER

Dr Mark Zammit Maempel 'Reducing forces in orthodontics' at MFPB sponsored by Pro-Health. 8pm

OTHER PLANNED EVENTS

A day trip to Sicily. A Weekend in Barcelona. A lecture on Maltese fossils by Dr Charles Galea Bonavia. An abseiling day in Mtahleb. A lecture on the food served on the galleys of the Knights with a reception featuring such food.

DAM Cuccagna Quiz 2009 with Pro health

- From which tree is the wood derived from to make inter-dental wedges?
- Which 2 cranial nerves are involved in the 'gag reflex'?
- What % of the world's population suffers from SOME sort of periodontal disease?
- What % of the world's population suffers from SEVERE periodontal disease?
- If you smoke, how many times more likely are you to have periodontal disease?
- What % of alcohol does Cariax mouthwash contain?
- What is the % of chlorhexidine in Periokin gel?
- What used to there be in Cariax-sensitive to decrease sensitivity besides Sodium Fluoride?
- How much sodium fluoride (in PPM) is found in Sensikin toothpaste?
- How much fluoride (In PPM) is found in Fluor-Kin toothpaste?

Answers:

1. Sycamore tree
2. 9, 10
3. 70%
4. 10-15%
5. Four
6. 0%
7. 0.2%
8. Potassium nitrate
9. 1450ppm
10. 800ppm

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.



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



GlaxoSmithKline
Fighting against acid erosion

Creating a customised protective face mask following maxillofacial trauma – a case report

By Dr Tim Vella Briffa B.Ch.D

HISTORY AND EXAMINATION

A 29 year old professional football player was referred by his dental practitioner complaining of tenderness on the left side of his face and restricted mouth opening after sustaining an elbow to the face during a professional football match one week earlier.

Clinical examination revealed trismus (24mm) with discomfort on opening. Palpation revealed flatness of the zygomatic arch on the left side with no other palpable steps in the facial skeleton. No ocular lesions were present.

Occipitomental 20°, occipitomental 30° and submentovertebral radiographs were taken which confirmed that the fracture was limited to the zygomatic arch and that the fracture was displaced centrally.

SURGICAL TECHNIQUE

Closed reduction of the fracture was performed under general anaesthesia via the temporal (Gillies) approach. A 2-cm incision was placed behind the temporal hairline approximately 6 cm above the zygoma. The incision was carried through the skin, temporoparietal fascia (superficial temporal fascia), and temporalis muscle fascia (deep temporal fascia).

A Howarth's elevator was used to dissect a tunnel superficial to the temporalis muscle and deep to the zygomatic arch. A Rowe's zygomatic elevator was inserted and lateral pressure applied to reduce the bone fragments.

Gentle palpation of the zygomatic arch and visual observation for any facial asymmetry was done to

ascertain proper bony alignment. The next step was patient preparation for the facial impression.

IMPRESSION TECHNIQUE

Since the patient was under general anaesthesia the airway was protected. The nostrils and ears were blocked out using cotton wool to prevent entry of alginate. Facial hair in and around the area was covered with petroleum jelly to prevent entrapment of impression material and subsequent distortion on removal of impression.

Alginate was mixed with cold water to a runny consistency and spatulated on the forehead (Fig.1). The alginate was allowed to flow gently down the face and around the patient's facial features. Care was taken to avoid any air bubbles. Once the area was covered with a sufficient thickness of alginate (3mm) a few layers of gauze were laid down which adhered to the alginate.

A layer of fast setting plaster was placed over the gauze and allowed to set, giving the alginate a backing that supports the impression and prevents distortion as it was being removed (Fig.2-4). The impression was disinfected, kept moist and sent to the laboratory.

In the laboratory the impression was cast in dental stone (Fig.5) and a few mm of relief were provided over the fracture site using plaster of paris (Fig.6).

A thermoforming material (Perspex) of 1.5mm thickness was moulded over the cast. All excess material was trimmed leaving enough material to provide protection for the zygomaticomaxillary complex, superciliary arches and nasal

bridge (Fig. 7-9). Two slots were prepared just anterior to the ears and an elastic band passed through to keep the face mask in place.

The mask is secured to the face with Velcro. The nasal bridge area and the slots for the elastic bands were reinforced with a doubled thickness of the same thermoforming material.

POST-OP

The patient was recalled after one week to try on the face mask. Minor alterations were necessary to improve comfort and vision. Sutures were removed. Final adjustments were done in the lab and the face mask was polished.

The patient was asked to wear the face mask for 4 weeks to allow time for healing. In the meantime he was able to resume his daily training routine. Within a few weeks the patient regained full mouth opening and all discomfort was gone.

DISCUSSION

The zygomatic bone occupies a prominent and important position in the facial skeleton. It forms a significant portion of the floor and lateral wall of the orbit and a portion of the zygomatic arch, otherwise known as the malar eminence.

The zygoma is the main buttress between the maxilla and the skull, but despite its sturdiness, its prominent location makes it prone to fracture [1-2]. Cerulli et al [3] assessed the rate of craniomaxillofacial fractures in soccer and the areas where they occur, describing above all the injury pattern of this sport.

Continues on the next page.

CREATING A CUSTOMISED PROTECTIVE FACE MASK FOLLOWING MAXILLOFACIAL TRAUMA – A CASE REPORT

Continues from the previous page.

They examined a range of 7 sports disciplines, but football was responsible for sports-related maxillofacial fractures in 34 of 46 cases (73.9%). The zygomatic and nasal regions are mainly involved. Direct contact between players generally caused football-related maxillofacial fractures: head-elbow impacts (21 cases) or head-head impacts (14 cases).

The main challenge in these particular patients is to give them the possibility of a very short convalescence period and to make possible their agonistic activity as soon as possible. This can best be achieved by providing the patient with a protective face mask. These are available commercially but tend to have a loose fit, providing little protection [4]. Therefore the best option would be to create a customised face mask from a facial impression. One such impression technique was described earlier whereby

an alginate impression was taken whilst the patient was anaesthetised. This same technique can be employed with the fully conscious patient with minor modification. The patient is normally sat in an upright position as gravity affects the soft tissues of the face and the impression can be consequently distorted. The patient must also prevent facial movement for the same reason. It is a claustrophobic experience which might be too much for some patients to handle, therefore reassurance is essential.

Other methods exist to obtain a facial image for maxillofacial use. Imaging techniques reported included stereophotogrammetry and moiré contourgraphy, ultrasonography, conventional axial computed tomography (CT), magnetic resonance imaging (MRI), lateral facial plates, facial plethysmography, surface radiography and laser surface scanners. As accurate as these methods may

be, they are very expensive to run. Some methods unnecessarily expose the patient to radiation (CT). Surface laser scanners have the advantage of being relatively inexpensive, fast, accurate, non-invasive, non-contact, and non-ionizing. They consist of a low-power laser beam which is moved along the face to be scanned and is followed from an offset angle by a video camera that calculates the coordinates of the surface by triangulation and saves the data to the computer.

Rapid manufacturing equipment is able to use the data after processing to form three-dimensional objects by additions of layers of material. These manufactured objects are thus custom designed for the patient but are engineered as compared with craft-based models made by traditional methods. The facial image has a number of maxillofacial uses such as fabrication of facial prosthesis' and burns masks [5].



FIG. 1



FIG. 2



FIG. 3

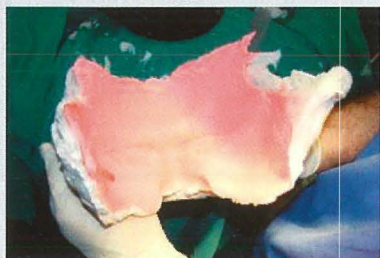


FIG. 4



FIG. 5



FIG. 6



FIG. 7



FIG. 8



FIG. 9

REFERENCES:

[1] Cohen J., and Mercandetti M. Facial trauma, Zygomatic arch fractures. <http://emedicine.medscape.com/article/1283924>. [2] Chao M.T., Paletta C., and Garza J.R. Facial Trauma, Sports-related injuries. <http://emedicine.medscape.com/article/1284288> [3] Cerulli G., Carboni A., Mercurio A., Perugini M., and Becelli R. Soccer-related craniomaxillofacial injuries. *J. Craniofacial Surgery*, 2002, 13(5):627-630.

[4] Cascone P., Petrucci B., Ramieri V., and TitoMatteo M. Security hi-tech extra-light device mask: A new protection for [soccer] players. *J. Craniofacial Surgery*, 2008, 19(3):772-776. [5] Chandra A., Watson J., Rowson JE, Holland J., Harris RA and Williams DJ. Application of rapid manufacturing techniques in support of maxillofacial treatment: evidence of the requirements of clinical applications. *J. Engineering Manufacture*, 2005, 219, 469-475.

ACKNOWLEDGEMENTS:

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Dr. Nikolai Attard, B.Ch.D, MSc Prosthodontics (Toronto), PhD (Toronto) . . .
Victor J. Galea, SRDT o.b.o. Dental Technology Studios.

Fixodent[®]



**Strong hold,
all day long**



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

Proven in post-surgical patients (n = 13)

Assessed in a sample of periodontal post-surgical patients¹
Difflam™ 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,

Difflam™ Oral Rinse showed:²

- 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
Difflam™ Oral
Rinse.¹**



GINGIVAL INFLAMMATION



APHTHOUS ULCERS

**Effective relief of pain
and inflammation^{1,2}**

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ORAL RINSE
BENZYDAMINE HYDROCHLORIDE



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Clinical studies have confirmed the efficacy of
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- in post-radiation mucositis⁴
- in post-chemotherapy mucositis³
- in gingival inflammation¹
- relieving pain associated with aphthous ulcers²

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- Pleasant taste
- Sugar free
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and the only oral rinse with analgesic,
anti-inflammatory and local
anaesthetic action.

**AVAILABLE ON
PRESCRIPTION**

TREATMENT PLANNING FOR THE PERIODONTAL PATIENT

The periodontally-compromised patient presents a particular challenge with respect to a stable long-term treatment outcome.

The first considerations should be:

- i. Slight, Moderate (5mm) or Severe (7mm+) Pockets?
- ii. Generalized or Localized (30% of sites)?
- iii. Chronic or Aggressive?
- iv. Intact Dentition or Partially Edentulous?

The sum of these considerations has a distinct bearing on the treatment planning, which can be dealt with along the following lines:

- Initial Therapy
- Surgical Therapy
- Occlusal Therapy
- Orthodontic Therapy
- Implant Therapy
- Prosthetic Therapy
- Supportive Therapy

1. INITIAL THERAPY

Mechanical debridement and elimination of obvious aetiologic factors.

1a. Scaling and Polishing – a thorough full mouth scale and polish, if necessary in two or more visits, is the cornerstone on which all periodontal treatment is based. It is preferable to visit the same quadrants on two separate occasions several days apart than to attempt complete quadrant/s scaling in one visit. Checking the patient's oral hygiene regimen and suggesting improvements and motivating the patient to persevere are all part of any successful treatment regime.

1b. Root Planing and Curettage – in relatively deeper pockets, deeper debridement procedures under local anaesthesia may be required, depending on the patient's pain threshold and response to scaling. The Durr® Vector System is based on vertical ultrasonic instrument tip movement, as opposed to oscillating tip movement in

conventional ultrasonic scalers and delivers a diluted pumice slurry which facilitates thorough pocket debridement and reduces treatment time considerably

1c. Antibiotic Therapy, whether systemic or local cannot be considered a substitute for the above and has no place in routine treatment. The obvious exception is the presence of suppuration.

(Augmentin and Metronidazole in combination or Spiramycin and Metronidazole preparations – these wide-spectrum antibiotics are necessary in the clinical setting where we do not have ready access to microbiologic examination)

Localised Chlorhexidine and/or Doxycycline application may help to resolve chronic bleeding sites but these and other mouthwashes/gels are also to be considered only an adjunct to faultless mechanical debridement.

The role of bacterial plaque is only relative to the host factors (immunological – altered production of cytokines and other anti-inflammatory factors) Treatment regimes may have to change from antibiotic to anti-inflammatory since a breakdown or changes in the immunological response may lead to chronic inflammatory processes and the infective process is only secondary to the inflammation

1d. Simple aetiologic factors, such as filling overhangs, should be removed as soon as is practically possible.

2. SURGICAL THERAPY

2a. Gingivectomy and Gingivoplasty

2b. Regeneration – E-PTFE membranes, bone substitutes and enamel matrix proteins (eg Emdogain) The latter may require a long learning curve to master, but the results obtainable are excellent.

2c. Extraction – the only reason extractions come this far down the list is that it is surprising how many mobile teeth that would easily be condemned to forceps survive for several years after debridement and regeneration.

2d. Surgical removal of local exacerbating factors such as fraena with high attachments.

3. OCCLUSAL AND ORTHODONTIC THERAPY

These are considered together because many times occlusal contributors to periodontal conditions can only be resolved orthodontically. After addressing the periodontal condition and obtaining resolution consider orthodontic treatment to correct occlusal abnormalities which may have arisen from the periodontal situation.

3a. Removable appliances incorporating anterior biting platforms can act as Dahl appliances to increase vertical dimension as a first step in reducing overjet (palatal trauma etc) and overbite.

3b. Fixed appliances may be the only way to close diastemata or to move teeth that have drifted into the spaces left by missing teeth with a view to satisfactory prosthetic and aesthetic replacement. In fixed appliance therapy it may be possible to exclude certain periodontally-compromised teeth from the appliance design

3c. Accurate occlusal analysis and judicious occlusal adjustment will eliminate plunger cusps and other traumatic situations in conjunction with orthodontic tooth movement or on its own in cases where this is not warranted or practical.

3d. Uprighting posterior teeth in conjunction with debridement and possible adjunctive therapy may reduce mesial pocket depths considerably

Continues on the next page.

TREATMENT PLANNING FOR THE PERIODONTAL PATIENT

Continues from the previous page.

- 3e Extrusion of teeth below the occlusal plane helps bone to grow in localised defects around the same teeth. Subsequent extraction results in a more favourable implant bed

4. IMPLANT THERAPY

Although it has been shown that immediate post-extraction implant placement does not prevent alveolar bone remodelling, implants prevent vertical bone loss.

It has been shown, in a 5-year study, that in cases of Chronic Generalised Periodontitis (CGP) there is a 100% implant success rate as opposed to 88.8 success in cases of Generalized Aggressive Periodontitis (GAP) – Mengel and Flores de Jacoby, *J Perio* 2001 vol 72: 977-989.

In another 10-year study, GAP showed more attachment loss on remaining natural teeth and more bone loss around implants than CGP – *J Perio* 2007 vol 78: 2229-2237.

- 4a It is always necessary to perform initial therapy and appropriate surgical treatment to reduce pocket depth around natural teeth to no more than 5mm maximum before considering implant placement.
- 4b Just clearing a periodontal patient and turning him or her into an implant patient without motivating and treating him/her is courting disaster

However, a past history of periodontal disease is not a contra-indication to implant therapy and has only a little effect on the long-term survival of implants

- 4c In long-term periodontal patients, the 5- and 10-year survival rates of implants placed with a 2-stage procedure are 97%, whereas the respective survival rates for 1-stage implant protocols are 84 and 78% – Baelum and Ellegard 2002

5. PROSTHETIC THERAPY

Once the occlusion is stabilized replace missing or unsaveable teeth

- 5a Splinting teeth after occlusal/orthodontic therapy may be required. Bridgework may be one way of doing this especially where endodontically treated teeth are present.
- 5b The type, material and occlusal features of any prosthesis must be carefully evaluated and selected based on the outcome of periodontal treatment, patient motivation and possible habits such as smoking.
- 5c Control occlusion – set up prosthesis occlusion for function and aesthetics. Avoidance of secondary occlusal trauma results in a self-maintaining occlusion

6. SUPPORTIVE THERAPY

Success rates are dependent on the success criteria defined and laid down to the patient

- 6a A customized maintenance and recall system should be presented to the patient and their full understanding and commitment to compliance should be demanded
- 6b Control of pathogenic flora is the key to inflammation control.
- 6c Cessation of smoking should be insisted upon and assistance and encouragement should be provided.

With higher life expectancies and net decreases in caries rates, we are facing a tsunami of periodontal problems and peri-implantitis in the medium-to-long term. The extent of these will depend on our appreciation of the aetiological factors of periodontal breakdown and our meticulousness in treatment planning, execution and maintenance.

*Dr Joseph Xuereb BChD(Hons),
MFGDP(UK), MGDS RCS(Eng),
FFGDP(UK), FICD*

SPOFA-DENTAL: AN APPRAISAL

By Dr David Muscat

SPOFA is no spoof. This is a Kerr company based in Eastern Europe. Some materials are available in Malta.

OPTICOR FLOW

A light cured microhybrid low viscosity composite. It provides fluoridation emission. It has a decreased modulus of elasticity.

It is radiopaque, and handles well. Applied with a syringe it is cured in layers of 2mm. Line deep cavities with calcium hydroxide.

SUPER-COR

A light cured microhybrid composite. I find the material a bit soft and prefer to use it for anterior teeth as I find it difficult to build out contact points posteriorly. It is good for buccal composites.

KAVITAN PLUS

A radiopaque glass polyalkonate glass ionomer material. It handles well, and provides good aesthetics. It does take at least 4 minutes to set. I find it suitable for core build ups.

KAVITAN CEM

A chemical cured glass ionomer cement for crowns, bridges, posts, screws and onlays.

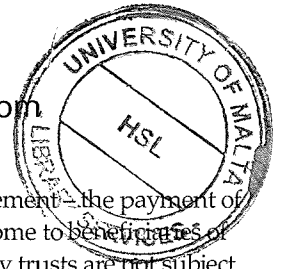
It can also be used as a liner under composite fillings, and has a 5 minute setting time. In orthodontics it can be used to cement bands and brackets.

ELASTIC CHROMO

Alginate sets in 2.5 minutes from when mixed at 23 degrees celsius. It has a 120 hour stability. This is a great property of the material. It has a colour indicator at different stages of the set.

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- HSBC will be glad to provide you with a free Financial Planning Service conducted by professional advisors licensed by the MFSA. We compare the importance of going through this service with an annual health check as it is important to look at your "financial health" annually too.

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- A trust, in very simple terms, is a newly introduced legal framework by which one or more persons transfer assets / property to another person or entity that will be responsible for managing and distributing these assets for the benefit of someone else.
- HSBC is a global organization having a considerable number of years experience in Trusts, and this experience will enable us to better assist you in setting up and managing the Trust.

Why you should consider a Trust:

- Confidentiality - the trust deed is a private arrangement, so nobody has to know of its existence other than the parties concerned.
- Asset Protection - freedom from creditors as trust asset are not usually included in bankruptcy arrangements.
- Prevent assets from being wasted by beneficiaries the trust allows the transfer of benefits on certain assets without transferring the legal ownership.
- Tax Treatment – All income distributions are made gross without any deductions of tax.

- Tax Management – the payment of savings income to beneficiaries of discretionary trusts are not subject to the provisions of the European Savings Directive.

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Maxicredit Loans: - loans secured by the equity value of your home and repaid over a maximum period of 25 years to purchase assets by maximising your "dormant" equity.

Buy to Let Loans: - Our Buy to Let Loan will enable you to acquire a residential property and finance the repayments from the rental income received.

Yacht Finance: - Our Yacht Finance Loan is ideal if you want to borrow to purchase the boat of your dreams. What's more you can do this without charging your property to the bank.

THE VINUM DAM QUIZ 2009

1. In Rabat, the Roman villa dates back to which century?
2. St. Paul's and St. Agatha's catacombs date back to which century?
3. What year was the French invasion of Malta?
4. What year did the British arrive in Malta?
5. What was the year of the Norman conquest?
6. What year did the Phoenicians arrive?
7. What exactly does the word 'Mosta' mean?
8. In which country several years ago was a wine company accused of adding 'antifreeze' to the wine?
9. What do you immediately add to a red wine stain on a carpet to remove it?
10. What is the ph of Linos Merlot?

Answers:

- | | |
|-----------|---------------|
| 1. 210BC | 6. 750BC |
| 2. 60 AD | 7. Middle |
| 3. 1798AD | 8. Austria |
| 4. 1800AD | 9. White wine |
| 5. 1091AD | 10. 3.5 |

BIAL

PORTUGUESE MAN O' WAR

A product appraisal by Dr David Muscat

BIAL is an international pharmaceutical company which has just celebrated its 85th anniversary.

It started off by producing and commercializing various drugs under license of other pharmaceutical companies such as antibiotics, analgesics, anti-asthmatic, antihistamines, cholesterol and hypertension, antidepressants, anxiolytics etc... mainly in Portugal followed by Spain.

Today, not only is it active in over 40 countries over 4 continents but it has also engaged in research and development.

In the pipeline there are several patented products bringing innovative solutions in different therapeutic areas; central nervous system, cardiovascular system, respiratory system, musculo-skeletal system, immunotherapy etc... the first to emerge on the market will be Zebinix (an anti-epileptic) in 2010.

Bial products have their product name embossed on the side of

the box in braille and I found this quite innovative. Also the tablets are in blister packs of 4 which makes it easier for the chemist to dispense a few more easily.

Bial is represented locally by Ms Nadia Cassar and Ms Jana Chetcuti have the following products relevant to dentistry in Malta

1. NOPRILAM

Amoxicillin Clavulanate. (under license Smithkline Beecham plc UK).

This is a bactericidal antibiotic with a broad spectrum of activity with various indications including periodontal and apical abscesses, cellulitis, oral infections and post surgical therapy.

The pediatric suspension has a nice strawberry flavour and is sugar free. NOPRILAM 400 (457MG/5ML) 70 mls bottle.

Noprilam DT amoxil 875mg +clavulanic acid 125mg per tablet(box 16 tablets)

Noprilam 500-amoxil 500mg +clavulanic acid 125mg per tablet (box 16 tablets)

The Noprilam 500 is given 3 times a day.

2. SEDOXIL

Active ingredient; mexazolam which is an effective and selective anxiolytic without major side effects.

It is used to pre-med anxious patients the night before and two hours before a complex surgical dental procedure. There is quick oral absorption and a rapid onset of action.

A GREEN FORM IS REQUIRED FOR THIS LOCALLY

3. RINIALER

Active ingredient; RUPATADINE. For serene breathing and natural well being.

This is taken once daily and is non-sedating. It is used for allergic symptoms and for persistent allergic rhinitis.

THE ADHESE ONE SELF ETCH

An appraisal by Dr David Muscat

Self service.
Self cleansing.
Self assessment.
Now *self-etch*.

I'm quite conservative. Straight laced, polished shoes, no nonsense and "meat and two veg".

I've always etched, washed and dried and bonded, and "you can't teach an old dog new tricks" but "give a dog a bone" and he may change.

The Adhese system Vivapen provides an ergonomic user friendly system that is quick and useful especially when time is of essence.

Also if teeth are hypersensitive and I don't want to "shock and awe" the patient with an etch I would gladly use this system.

It is good when treating restless children or agitated adults. Adhese is a single component, self etching,

light curing bonding adhesive system. Click to activate and apply a brushing motion, all in 30 seconds.

A ten second light cure is required, followed by your composite filling.

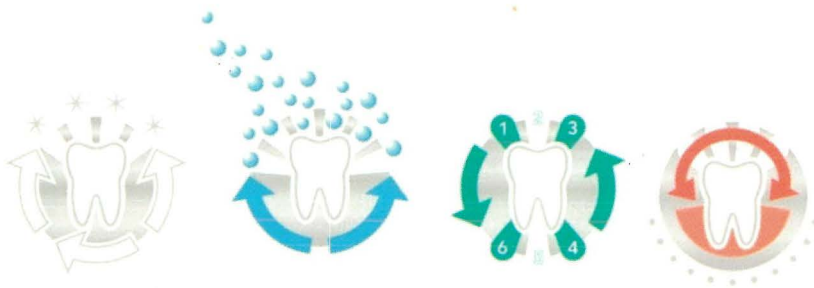
It is a good pen system from a reputable company Ivoclar Vivadent and suitable for us dentists who always go straight to the point.

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Clinical **WHITE**



Clinical **CARE 6in1**

Clinical Fresh **GEL**



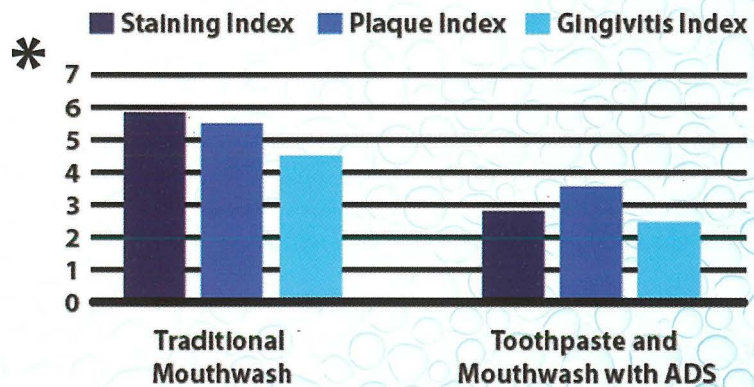
Clinical **ACTIVE**



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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.



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CURASEPT
 SWISS ORAL CARE SYSTEM

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

THE NON SURGICAL TREATMENT OF PERIODONTAL DISEASE

BY PROFESSOR AIMETTI, Professor of Periodontology at University of Torino.

And supported by Dr Nicholas Charles, Periodontist

Summarized by Dr David Muscat

Pathogens colonize dental plaque. Disease is initiated by subgingival bacteria, and this modulates the host response.

FACTORS:

Bone loss and age, prevalence of pockets, and tooth loss, compliance, social, medical, smoking, medication, Cyclosporin A, calcium antagonists, stress. The microflora include *P. Gingivalis*, *Bacteroides* and *Actinomyces A*.

PERIODONTITIS:

1. Levis-less than third root length bone loss
2. Gravis-more than third root length. bone loss-prognosis questionable
3. Complicated-bony defects and furcation involvements – prognosis hopeless.

A prognosis must be made for every single tooth.

CRITERIA

Biological:

- Systemic heart disease
- Occlusal disharmony and trauma
- Dental anatomy
- Visibility and access
- Patient behaviour
- Clinical experience and competence
- Bone loss and mobility

PERIODONTAL THERAPY

- Maintenance
- Osseous resective surgery
- Guided tissue regeneration
- Extraction -implant

NON SURGICAL THERAPY

Elimination and prevention of recurrence of supra and sub gingival bacterial deposits from the tooth surface. the elimination of periodontal and anatomical defects.

When infection has been controlled, the anatomical problem persists -aberration of tissues.

Sextant or quadrant scaling of roots.

THE FULL MOUTH DISINFECTION

(*Quirynem et al .j clinical periodontology*)

Clean all perio pockets /tongue/oral epithelium/dental surfaces/palate/tonsils. All above done within 24 hours.

A full scaling and root planing done within 48 hours under LA. Brush dorsum of tongue with 1% chlorhexidine gel . Mouthrinse with 0.2% chlorhexidine for 1 minute.

Subgingival irrigation of all pockets 3 times for 10 minutes with 0.2% chlorhexidine twice daily for 1 minute ,and then for following 2 months.

Oral hygiene instruction and tongue cleaning.

Systemic review of effects of full mouth debridement (Lang, Cheung) – all treatment approaches may be recommended for debridement. The most important is optimal oral hygiene.

The use of systemic microbials against the subgingival biofilm(Herrera,Alonso ,Leon)-NOT to be used in most patients but only to be considered in aggressive periodontitis or severe and progressive. Antibiotics are always used in conjunction with mechanical debridement. The debridement must be carried out within 7 days.

HAND SCALERS-SONIC-ULTRASONIC = SIMILAR RESULTS

Do not excessively instrument the tooth surface as this may cause sensitivity and pulpitis due to the removal of cementum.

Gingival lobular haemangiomas and cyclosporin A induced gingival overgrowths do not need surgical treatment but good perio therapy.

A LONGITUDINAL PERIO TISSUE ALTERATION STUDY DURING SUPPORTIVE THERAPY

(*Rosley,Serino,Hellstrom,Lindhe,Socransky*)

232 patients with normal periodontitis – normal group NG

These were seen once or twice yearly with supra and sub gingival scaling and root planing by trained hygienists. 170 high susceptibility group HSG non surgical therapy following LA 4 times yearly recall visits the sites exhibiting bleeding on probing and a probing pocket depth of more than 5mm received repeated subgingival instrumentation.

- HSG exhibited a larger number of sites with deep pockets than the normal group NG.
- NG lost no teeth.
- HSG lost one tooth or more than one tooth.
- HSG exhibited higher number of progressive periodontal sites than NG.

IMPORTANT

Occlusal trauma causes more demineralization of bone. Always check occlusion. Check lamina dura on radiograph.

Molars with furcation involvement -the results are not so good but the prognosis is not hopeless.

PROBLEMS WITH NON SURGICAL TREATMENT -- bleeding on probing, pockets greater than 5mms, and interdental craters.

PERIODONTAL SURGERY USED IF STILL BLEEDING ON PROBING AFTER NON SURGICAL INSTRUMENTATION, and for soft tissue aberrations with reversed osseous topography.

OSSEOUS RESECTIVE SURGERY

Recontour bone to have a predictable removal of periodontal pocket

OSTEOPLASTY

Reshape alveolar process to achieve more physiological form without removing supporting bone.

OSTECTOMY

Eliminate interbony pockets, including removal of supporting bone

REVERSED OSSEOUS TOPOGRAPHY

Reshapes abnormal bone due to periodontitis

Aim is to resemble normal bone, with minimal probing depth, and a good morphology with good oral hygiene

APICALLY POSITIONED FLAP

Palatal flap thin-do not apically position. Use vertical mattress sutures.

GUIDED TISSUE REGENERATION -GORE MEMBRANE

Reproduction of lost part to restore architecture and function.

Regeneration of cementum, periodontal ligament and alveolar bone.

GTR can be used to increase bone.

IMPORTANT

30% of patients who have lost teeth to periodontitis will then get peri-implantitis. 5% of patients who have lost teeth to periodontitis will get peri-implantitis

SUSCEPTIBILITY TO IMPLANT LOSS = SUSCEPTIBILITY TO PERIODONTITIS



Left: On Thursday 14 May Professor Aimetti, Professor of Periodontology from the University of Torino gave a lecture entitled "The non Surgical treatment Of periodontal disease". The picture shows Dr Aimetti together with Dr David Muscat, vice President DAM and Dr Nicholas Charles, son of Dr Tony Charles.



The Dental Association of Malta recently held a lecture at the Maritime Museum in Birgu entitled 'Tasting The Grand Tour' by Mr Liam Gauci BA(history) curator.

This was based on the exotic travels of Don Ignatio Mifsud, from Malta to Rome during the time of the knights.

The DAM collected 500 euro during the event for 'Puttinu Cares' and the photo shows Dr David Muscat vice President DAM handing over the cheque to Mr Paul Camilleri, the Puttinu representative. Also in the picture are Mr Liam Gauci, Dr Matthew Cachia, treasurer DAM and Dr Adam Bartolo DAM President.

Following the lecture Pharma MT, agents for Fittydent, represented by Mr Marco Manara (B Pharm Hons) hosted the dentists to a great meal at Don Berto restaurant in Birgu. The event was very well organized by Dr Lino Said, social events coordinator of the Dental association and very well attended.

HEMISECTION

– A Case Report

By Dr Antoine Camilleri B Ch D

A 20 year old Maltese woman presented at the clinic with severe dental pain. Her medical history was clear.

Examination revealed an erythematous mucosal swelling apical to the heavily restored lower right first molar, which was tender to percussion and with Grade 1 mobility. The oral hygiene was good.

She reported that the molar had undergone endodontic treatment some years before, confirmed by the diagnostic periapical radiograph taken. [Fig. 1]

The radiograph revealed a large periapical radiolucency around the mesial root of the molar, while the distal root apex appeared unengaged by the area.

On close inspection of the radiograph it was clear that a fractured instrument was trapped in the apical third of a mesial canal, contributing to insufficient apical canal debridement and proper sealing.

Furcal involvement was also apparent. The treatment options of re-root treatment and apicoectomy were not embraced, leaving extraction of the whole tooth – or hemisection!

A course of penicillin was prescribed and the more conservative option of hemisection was suggested as the treatment plan, which the patient agreed to.

A week later the inflammation had subsided and the molar was carefully and completely sectioned under local anaesthetic. The mesial root was elevated and extracted. Attention

was paid to the complete removal of the furcal morphology which could serve as a plaque trap later on.

A provisional glass ionomer cement allowed the remaining crown to be restored till root socket healing took place.

A month later composite resin build up restoration was possible, henceforth achieving what is described 'premolarization' of the hemisected molar. See Fig. 2.

Four years passed before the patient visited again, this time for a check up! The restored hemisected molar was stable and functional, the gingivae were healthy, and the review radiograph revealed complete resolution of the past bone radiolucency. [Figs 3 and 4]

Interestingly, while no bone augmentation was actually done, there is surprising natural bone fill in the root socket.

While literature suggests crowning hemisected molars, it was agreed that since the composite resin restoration was very satisfactory and afforded a degree of protection by partial cuspal coverage, no further treatment would be done, save for more frequent dental checkups!

No replacement of the missing part of the molar crown was deemed necessary either, with the occlusal stability and function present.

In the correct indications hemisection is a viable tool in the dentist's arsenal of treatment modalities, giving him/her positive professional satisfaction and a grateful patient.



FIG. 1



FIG. 2



FIG. 3



FIG. 4



MAGNIFICATION IN DENTISTRY

By Dr Paul Cassar

Over the last twenty years since qualifying dentistry has undergone many major changes due to new technologies and better understanding and better materials.

To discuss all of the changes here would not be appropriate however suffice to consider a few such as our current bonding systems, the rotary nickel titanium revolution in endodontics the genesis of implantology and in my opinion the most exciting advance is that of magnification.

Magnification can play a key role in all aspects of dentistry and should not be seen as the preserve of endodontists' alone.

There is no golden standard in doing clinical dentistry today we all strive to achieve the best for our patients with the tools and materials at our disposal.

However magnification allows us a new insight and allows us to better see that which we are trying to achieve.

Many clinicians today routinely use magnifying loupes to help in the every day practice of dentistry. These loupes usually magnify 2.5 times. At this magnification we get a larger field of vision when looking at the whole mouth.

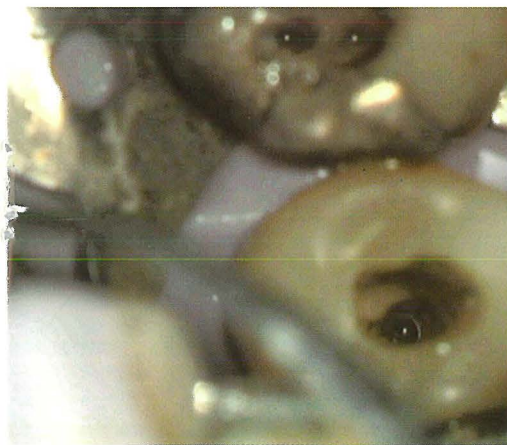
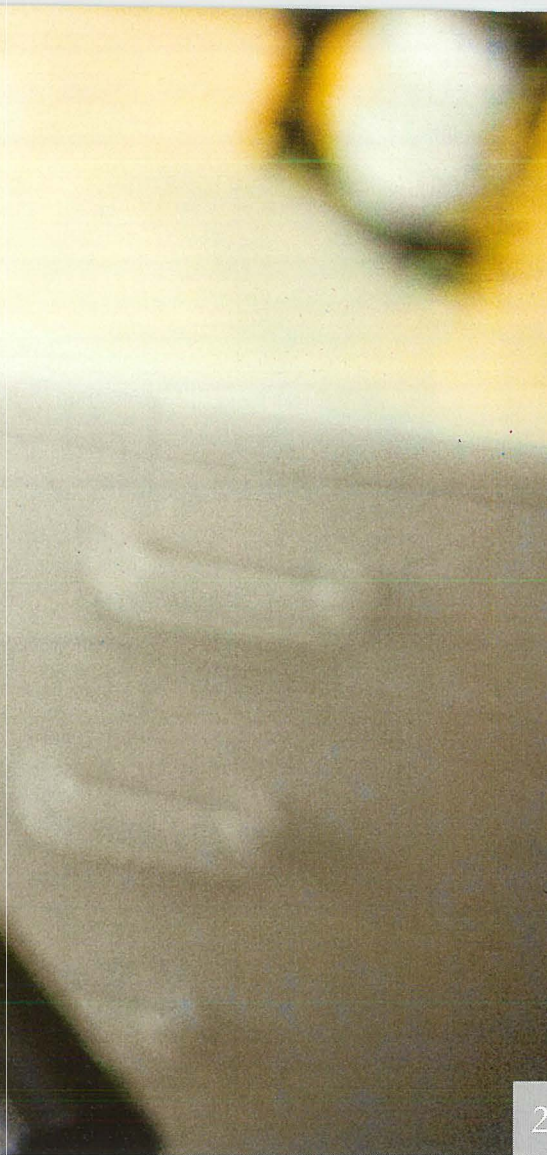
Loupes do work much better if the integral illumination system is also used as the increased light allows our eyes to resolve even greater detail. Personally when doing general dentistry I use Zeiss 3.8 magnifying loupes as these give a better half way house between my normal vision and my Microscope.

I purchased my operating Zeiss Prim Opmi microscope some 13 years ago. At that time Microscopes

were the preserve of specialists however over the years many have crept into general practitioners hands. I joined the endodontic revolution using nickel titanium rotary instrumentation some 17 years ago and was one of the first general practitioners' in the UK to do so.

Adding my operating microscope to my armamentarium greatly improved my ability to achieve dependable and stable long term results when doing endodontics. Twenty years ago the quoted success rate of endodontics was in the order of 75% which also means a quarter of all root treatments failed.

It is no wonder so many teeth were extracted and why implants with their known reliability have revolutionised our subject. However with today's modern endodontic techniques I can quote success rates as high as 99%. Teeth can be saved!



VIEW THROUGH MICROSCOPE AT 10X MAGNIFICATION

POST OP RADIOGRAPH OF 14 & 15

Continues on the next page.



MAGNIFICATION IN DENTISTRY

Continues from the previous page.

Once successful endodontics is achievable then it is only a matter of willing to secure and restore a tooth successfully.

I use a combination of Loupes and microscopy when doing general restorative dentistry. As this next sequence of images shows.

Even without the aid of loupes or microscopes magnification in dentistry can be seen.

Increasingly clinicians are moving over to computerisation and digital imaging both radiographically and photographically and we all know a picture paints a thousand words so we can magnify our image to see what our eyes would otherwise struggle to see.

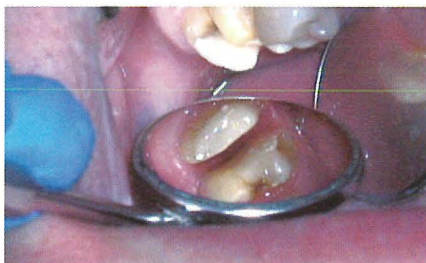
If any of you have followed my antics with treating Tigers and bears over the last few years I suppose the final solution is to magnify the teeth themselves!



FURCATION DEFECT 46



HEMISECTED



VIEW THROUGH MICROSCOPE



PREMOLARISED CROWN 46



46 6 YEARS POST OP

You can't control time...



but you can control its effects with **Colgate Time Control.**

With the passing of time, your gums do not cover as much of your teeth as they used to. Receding gums put you at risk of developing root cavities and could lead to further problems. The solution... **Colgate Time Control.**

Colgate Time Control has been specially formulated to provide you with everyday protection against the signs of ageing in your mouth.



Colgate Time Control Gum & Teeth Protection, Refreshing Taste

RIVA ARRIVA

THE BART ENTERPRISES WESTIN LECTURE BY MISS SISSE HANSEN FROM SOUTHERN DENTAL INDUSTRIES OF MELBOURNE AUSTRALIA

An appraisal by Dr David Muscat

The Australians want to enrich us with fluoride so they sent a dazzling Danish rep with a winning smile, Miss Sisse Hansen, to win us over.

They have a new exciting launch of the new Riva and Pola ranges. The Pola is a Tasmanian devil of a material.

The Riva is ionglass enriched-as clear as the waters of Botany Bay and as strong as the Coral of the Great Barrier Reef.

RIVA

- Use a conditioner like Riva Conditioner to remove smear layer
- Or else just etch for 5 seconds only
- Use a light cured coat like 'Riva Coat'.

SDI IONGLASS MAKES IT DIFFERENT

High ion releasing reactive glass which helps in remineralization of the natural dentition. Once fluoride levels in glass ionomer d

eplete they then are replenished by fluoride from toothpaste. Fluoride held within a glass matrix

THE STRENGTH OF RIVA MATERIALS

- High flexural strength (due to glass)
- High surface hardness value resulting in better wear resistance
- High compressive strength-enhances longevity of restoration by withstanding mastication forces.
- High early strength
- High bond strength
- A ten second mix
- Capsulated variety affords optimal ratio of powder/liquid otherwise material can be weakened
- Material is not expensive as SDI Ltd make everything themselves in Melbourne.

THE SELF CURE

Remove smear layer with conditioner, then wash and remove excess water, keep moist, mix material, apply self

cure GI to surface, apply Riva coat and light cure, final finishing under water spray. Leave 5.5mins for final finishing for regular set, and 3 minutes for fast set, from the start of mixing. The first 24 hours is most critical for glass ionomers.

THE SELF CURE IS:

Non stick, initially flows well, then becomes an easily condensable mass, has good radiopacity, when extruded it is glossy but then becomes matt.

At this stage do not manipulate as you will weaken the matrix. The low water solubility resists disintegration.

RIVA LIGHT CURE

- Increments of 2mm
- 11 shades
- natural-looking restoration

RIVA SILVER

- Same procedure as for self cure
- High radiopacity
- Light in colour
- Initial low viscosity, then becomes condensable

RIVA PROTECT

- Fissure sealing. Thick lining which can diminish with time but will leave fluoride rich area in fissure.
- Fluoride release
- Low viscosity
- Available in pink and white
- Contains amorphous calcium phosphate. This results in a slow release of calcium and fluoride ions and can remineralise tooth structure. (S.H.Abrams, M.I. Scarlett. & L.Trost 'Focus on Dental Caries Management' Beyond Extension For Prevention to minimal treatment'. (With self curing materials on occlusal surfaces one can use a piece of cellophane on the surface and get patient to bite onto it to form a contour before the material sets. (Dr Geoffrey knight)

RIVA LUTING

- Used for metal bonded NOT all ceramic crowns
- Low water solubility
- Long term wear
- Remove excess at gel stage and floss
- Sets in 4 mins and 10 secs
- 115 secs extra working time possible if the material is manipulated on the pad. Low film thickness of 17 microns

RIVA LUTING PLUS

Only in one simple yellow shade. No Bisphenol A (which may cause hormonal responses as it mimics oestrogen) (EDITORS Tip- remove excess asap as it is irritant to mucosa)

THE CO CURE TECHNIQUE

- Leave affected dentine (not infected) on the floor of cavity
- Fill with Riva self cure up to ED junction
- Then resin bonded GI paste used as a creamy paste
- Paint on with microbrush onto enamel walls and onto the GI
- Then one can place a composite over this without having to wait for GI to set, and burnish margins to prevent ditching and white lines. Use thumb pressure. Cure for 40 seconds. The light curing component sets both the composite and the resin modified glass ionomer. The setting of the self cured glass ionomer at the bottom is accelerated by the heat from the light. A cascade of reactions goes through the restoration.

Carbonated apatite reforms as fluorapatite at the base as you leave affected dentine on the floor of the cavity.

With this system

1. You do not need to wait 5 minutes for GI to set.
2. You do not acid etch, wash and dry.
3. The Riva glass ionomer creates a chemical bond to the tooth of 10 mega Pascal.

POLA BLEACHING

Peroxide is broken down to oxygen ions which are attracted to the carbon to carbon double bonds of stained molecules.

The oxygen destroys the double bonds. The shorter stained molecules are whiter.

The bleaching process continues for 48 hours after the dentist has carried out the office bleaching procedure. Bleaching maintains the structure of the tooth.

IN OFFICE BLEACHING

With oral mucosa burns apply vitamin E cream or baking powder mixed with water.

This will relieve the stinging. When using a light you will see a result closer

to the final result straight away. A flour-based pumice (without glycerine) is used to first clean teeth.

HOME BLEACHING KITS

Best to create a reservoir on the labial inner surface of the trays by painting a spacer on the model up to 1mm below the gingival margin before molding the tray

NON VITAL TOOTH WHITENING

Cut access at palatal aspect of foot filled tooth and protect the root canal with a little composite or GI 2mm below DEJ.

After bleaching do not replace fillings for 2 weeks.

(Editor's tip – always keep peroxide products in the fridge)

THE WIGIS DAM QUIZ 2009

1. Which has the lower ph, white or red wine?
2. Is it best to brush before or after a meal?
3. What is abfraction?
4. What active ingredient in toothpaste besides fluoride decreases dentinal sensitivity?
5. What is the best between-visit medicament during root canal treatment?
6. Which theory is the recognized one accounting for dentine hypersensitivity?
7. Is the antibacterial efficacy of NaOCl greater than laser irradiation?
8. Below what PH is enamel attacked in the mouth?
9. Below what PH is dentine attacked in the mouth?
10. What happens to alveolar bone if you apply an electrosurgical tip to it?

Answers:

- | | |
|--|------------------------------|
| 1. White wine | 4. Potassium nitrate |
| 2. Before | 5. Calcium hydroxide |
| 3. Loss enamel prisms at neck of tooth due to flexion at crown root interface. | 6. Fluid movement in tubules |
| | 7. Yes |
| | 8. 5.5 |
| | 9. 6.5 |
| | 10. Bone necrosis |

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THE CURAPROX ORTHOPAEDIC PACIFIER-BY DR HERBERT PICK

Appraisal by Dr David Muscat

Dr Herbert Pick has developed an orthodontically-optimised Curaprox pacifier whose pressure is directed laterally onto the dental ridge during sucking, as opposed to the pressure being transferred to the roof of the mouth as with conventional pacifiers.

The standard pacifiers may cause lateral crossbite, open bite, tooth misalignment and jaw deformity.

The Pick pacifier supports healthy jaw growth and minimizes the risk of a lopsided face. It helps to avoid orthodontic treatment in the future.

The Curaprox pacifier has 'side wings' which prevent crossbite. There is a slightly curved silicone shield which stands proud from the mandible so as not to impede the lip musculature and consequently the occlusion.

The superior aspect has soft edges. There are 4 ventilation vents for the skin resulting in no pressure points or irritation or eczema.

There are shield clips to use with pacifier band which can be removed for cleaning and when child is asleep..

Please contact agents G. Farrugia and Sons for further details tel 21437415

Soft Tissue Aesthetics

BY Dr Eirik Aasland Salvesen Specialist Periodontist.

A Cherubino event at Corinthia San Gorg.

Summarised by Dr David Muscat

Dr Salvesen, who hails from Norway (and could quite easily have doubled up as an A-HA pop group member) gave a concise talk on aesthetics.

MAIN POINTS

1. Team up with soft tissues and respect the soft tissue guidelines.
2. Use ceramic materials in the aesthetic zone.
3. Respect biological guidelines for implant placement and crown preparation.

Nowadays the prosthodontist will tell the implantologist where to place the implant and not vice versa. Soft tissue is the issue. The bone sets the tone. Periodontal maintenance is very important.

Human error is nowadays eliminated using scanners and robotic techniques.

SOFT TISSUES

- Colour, shape, texture, parallelism, zenit symmetry.
- Pink pale gingivae are beautiful
- Papillae important with collagen fibres visible as attached gingivae.
- Incisal edges parallel with cervical margins.
- A line from tip of canine to tip central and 1mm above lateral.
- Caution when extracting upper incisor so as not to lose bone and damage soft tissues.
- Shape, colour and texture decide the soft tissue.

SOFT TISSUE AUGMENTATION

Indications: increase in height and thickness of attached gingivae.
Techniques: gingival connective tissue grafting.

ORTHODONTICS-TIPPING

'It is not necessary to have attached gingivae for the maintenance of gingival health around teeth' (Wennestom and Lindhe 1983)

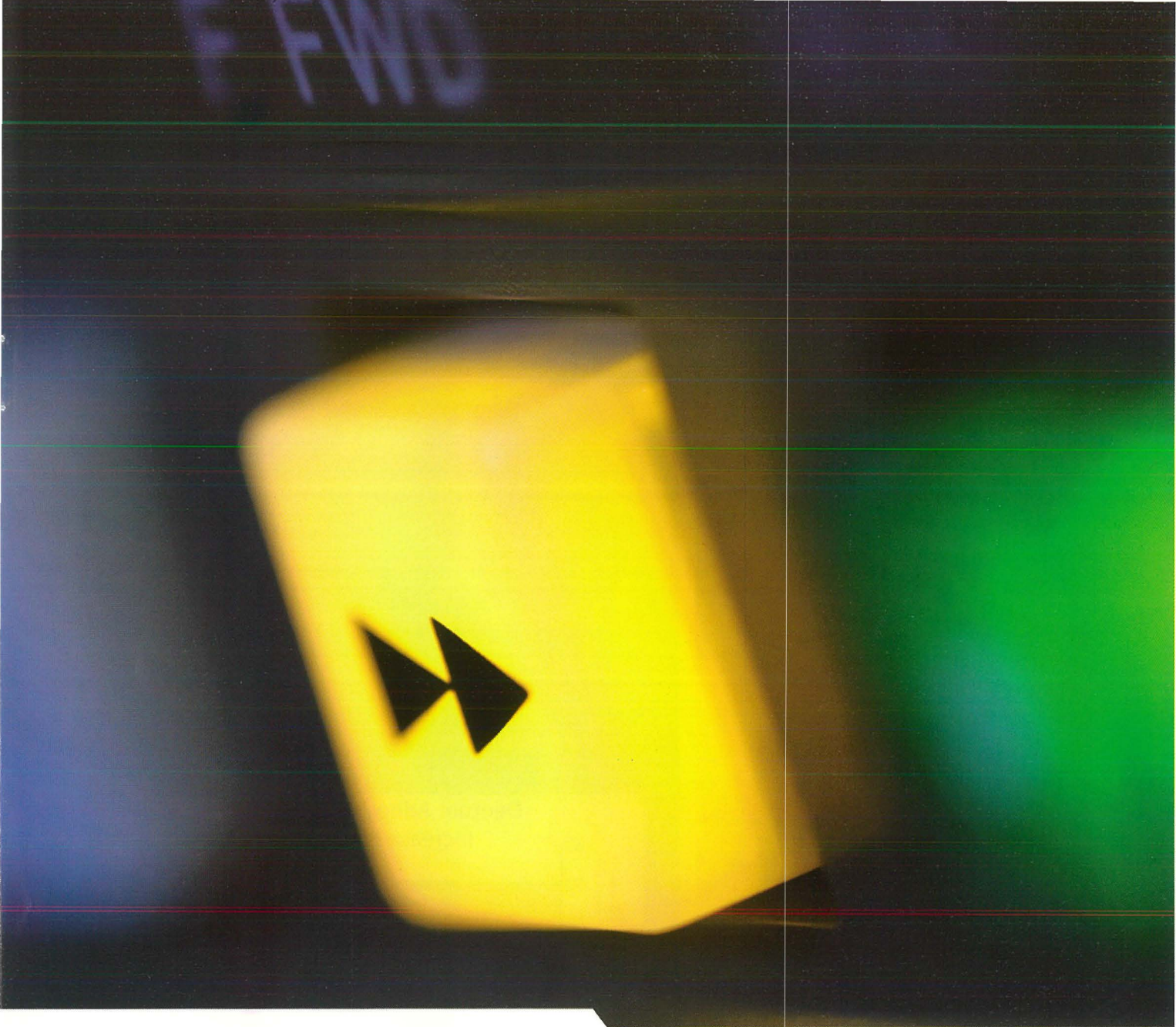
- Biological width is 2.04mm.
- If you go too deep with your implant into bone to hide metal you will get bone recession.
- Translucent ceramics are used nowadays.
- SPLIT FLAP – coronally advanced flap used to cover a recessed upper canine. A thin biotype can be changed to a thick biotype.
- EXCESS GINGIVAE = GUMMY SMILE. Gingivae excised.

In the anterior zone one must use all ceramics. Ceramic abutments are used and ceramic copings. There is a change in the transmission of light into the roots.

Bone can be built up to concave-convex form to create soft tissue. Some periodontists use a bur to create soft tissue shape (not recommended). Attachment loss on neighbouring teeth will mean tissue will recess. When placing implants in upper labial segment space them out and stay off the central line so you can manage the papilla. The technician will do a wax up and give you a guide for the gingivectomy procedure. The zirconium abutment is scanned.

Exercise extreme caution with excess cement. This has to be carefully removed. Modern cements are self etching and cause severe problems and fistulas.

Experience will result in operator predicting soft tissue outcomes when deciding on immediate implant placement following an upper incisor extraction.



FAST FORWARD

Dual-curing self-adhesive composite-based luting system

- Safe adhesion to tooth substance and restoration
- No etching, no bonding
- Odourless
- Minimal film thickness (5-10 µm)
- Suited for zirconia
- Extra Endo-Mixing Tips in each package, for precise applications, even in the root-canal



Bifix

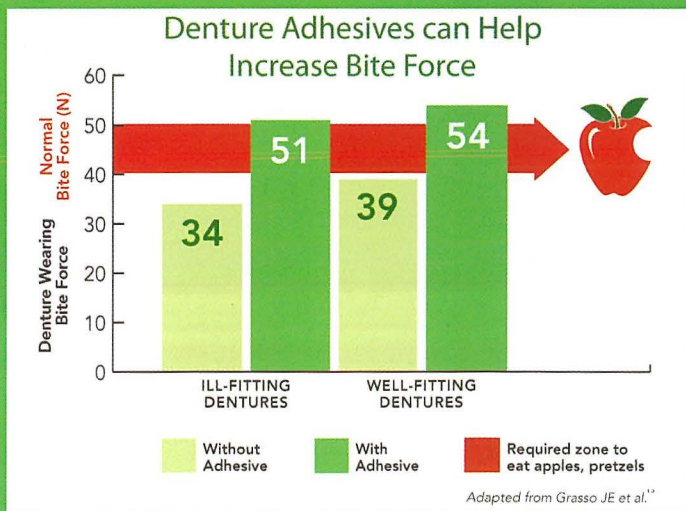


Help Build Your Patients' Confidence with Their Dentures



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.¹
- Improved Bite Force Can:
 - Allow patients to incise challenging foods²
 - Help improve stability and retention³
 - Help patients look, eat and speak with confidence.²



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

1. Roessler DM. Complete denture success for patients and dentists. *Int Dent Jnl* 2003; 53:340-345.
 2. Benson D, Rothman 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): 550-558.

GlaxoSmithKline. Your partner in denture care.





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

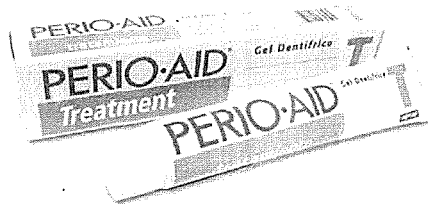


Perio-Aid Maintenance Mouthwash

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

Stroke In the Throat

By Dr. C. Corney, M.B., B.S., D.M.R.D., F.R.C.R., Specialist Radiologist, Sliema

CASE HISTORY

A 45 year old man was admitted to the ward with a week's history of increasing difficulty in swallowing fluids and solids and an intermittent gargley voice. For the last 30 years he had smoked 20-30 cigarettes per day.

Physical examination revealed a mild hemiparesis of the left leg and left arm. After multiple attempts he was able to swallow fluids and solids which made his voice gargley. When asked to cough, his voice returned to normal. Examination of the chest revealed diminished air entry and crepitations in the lower half of both lungs.

INVESTIGATIONS

A chest radiograph revealed bilateral extensive lower lobe consolidation. CT brain scan showed a small hypodense area, with no mass effect, in the right upper medulla. This was considered to be an infarct.

A detailed examination by the speech therapist revealed bolus hold-up in the pharynx. She confirmed the need for multiple attempts to initiate a swallow, with consequent gargley voice relieved by a voluntary cough, indicating intermittent respiratory tract aspiration.

A video barium swallow with the use of a slow play-back facility revealed a slower than normal transit time (normal < 1 sec) of 6 secs of barium through the pharynx.

The right side of the pharynx did not undergo the normal pharyngeal peristaltic waves of contraction compared with the left side.

There was abnormal pooling of barium in the right vallecula and pyriform sinus-which are pocket-like structures in the posterior wall of the pharynx (see diagram). These structures filled to

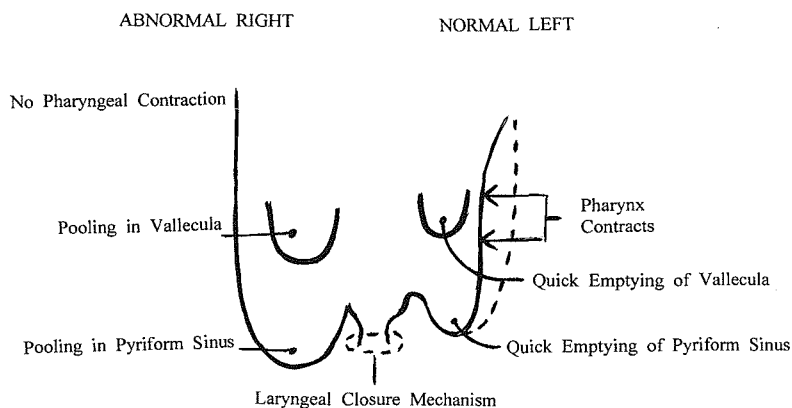


DIAGRAM SHOWING BARIUM-FILLED PHARYNX (viewed from the front)

overflowing causing a slow dribble of barium into the larynx (penetration) and down the trachea and bronchi into the lungs (aspiration) after the swallow.

If the patient turned his head to the right and swallowed no such leakage into the larynx occurred.

The barium bolus was seen to pass down the left side of the pharynx only, indicating that the paralysed right side was squashed flat by turning the head to the right. So the speech therapist advised swallowing only when the head was turned to the right.

This manoeuvre produced a dramatic improvement in symptoms in that swallowing was easier and the voice stopped being gargley permanently indicating an absence of aspiration on swallowing and timely closure of the laryngeal closure mechanism.

After a week there was considerable improvement in swallowing and in the hemiparesis. Considerable clearing of the aspiration pneumonia radiographically had occurred.

His voice remained normal. The patient was discharged home with instructions to continue swallowing with his head turned to the right.

One month later the patient was swallowing normally without the need for head turning. His hemiparesis had resolved.

CONCLUSION

The patient had suffered a minor infarct in the right side of the medulla. The fact that he displayed a right sided weakness of the pharynx and a left sided hemiparesis indicates that the infarct was in the upper medulla above the decussation of the supranuclear tracts leading to the relevant cranial nerve nuclei in the lower medulla.

The slow and faltering transit of the bolus through the right side of the pharynx with premature opening of the laryngeal closure mechanism (he had to breath sometime) led to passage of the remaining bolus into the larynx and respiratory tract causing aspiration pneumonia.

DISCUSSION

This case demonstrates that a stroke can cause silent aspiration of food and fluids into the respiratory tract. This is because the involuntary cough reflex (we call choking) to clear the larynx and respiratory tract does not work because the involuntary

cough centre for this in the medulla has been damaged by the infarct. This leads to accumulation of bolus on the vocal cords manifested by the gargley voice.

He is still able to cough voluntarily (which clears the gargley voice) because the voluntary cough centre is situated in the cortex unaffected by the medullary infarct.

Similarly the normal mechanism of swallowing in the pharynx is controlled by the involuntary swallow centre in the medulla which in this patient has been damaged by the infarct. (There is a voluntary swallow centre in the cortex but this controls only oral phase of swallowing- not the pharyngeal phase).

Rather frighteningly, 40% of all strokes have a consequent dysphagia, many of which have silent aspiration and pneumonia which can easily be missed clinically, so the doctor should be aware of this potentially lethal hazard.

Prophylactic treatment of the aspiration is easy in this case where there is a unilateral paralysis of the pharynx. Turning the head to the affected side and then swallowing leads to the bolus descending the good, unaffected side only, without the risk of aspiration.

DIFFERENTIAL DIAGNOSIS

The commonest cause of the above symptoms and signs is infarct. However other causes (such as Motor Neurone Disease, Myasthenia, Multiple Sclerosis and Malignancy) have to be considered but they are all associated with body symptoms which predate the difficulty in swallowing.

THE OUTCOME OF THE ABOVE MANAGEMENT OF SUCH CASES

1. The silent disease of aspiration pneumonia is identified early, reducing the risk of death.
2. Much earlier discharge from the ward reduces hospital costs considerably.

For once I am inclined to agree with the French medical cynic, Voltaire, that "the art of medicine consists of amusing the patient whilst Nature cures the disease," except that I would replace "amusing" with "assessing".

I am grateful for Susan Waitt's technical assistance.

AN ANTIBIOTIC ALPHABET: ANTIBIOTICS WE USE IN GENERAL DENTAL SURGERY

BY Dr David Muscat

AMOXIL: broad spectrum, oral infections, prophylaxis endocarditis

AMPICILLIN: broad spectrum, sinusitis, oral infections A combination of ampicillin and flucloxacillin is used to treat infections involving either streptococci or staphylococci.(eg.CELLULITIS).

AUGMENTIN: broad spectrum, fortified amoxil with clavulanic acid.(GSK)

AZITHROMYCIN: macrolide, used against streptococci

BACTIFLOX: Ciprofloxacin, broad spectrum, Quinolone group

CEPHALOSPORINS (CEFALEXIN AND CEFRADINE): oral infections but not first choice – soft tissue, also CECLOR (CEFACLOR).Cross sensitivity with penicillin (10%).

CLARITHROMYCIN (KLARICID) mild to moderate skin and soft tissue.

INFECTIONS – A MACROLIDE

CO-AMOXICLAV: Amoxil with beta lactamase inhibitor clavulanic acid.

DALACIN C: Clindamycin Staphylococcal bone and joint infections, endocarditis prophylaxis.

DOXYCYCLINE: treatment of destructive (refractory) forms of periodontal disease. An adjunct also in treatment oral herpes and recurrent aphthous ulceration.

ERYTHROMYCIN: ORAL AND DENTAL INFECTIONS BUT NOT FIRST CHOICE

FLAGYL: metronidazole, acute ulcerative gingivitis (good for anaerobes)and pericoronitis.(TINID AZOLE also used for AUG.It has a longer duration than metronidazole)

FUSIDIC ACID: cream fusidic acid 2% or ointment sodium fusidate 2%,

staphylococcal skin infections and penicillin resistant staphylococcal infections.

KLACID: sinusitis, tonsillitis, pharyngitis, dental abscess (Abbott).

KLERIMED: Clarithromycin, macrolide, respiratory tract infections, streptococci.

KLONT-METRONIDAZOLE KLAMOKS (AMOXIL AND CLAVULANIC ACID): Dental infections (Bilim).

METROLYL-METRONIDAZOLE: suppositories.

MOXICLAV: amoxil and clavulanic acid, skin and soft tissue infections, oral, dental and maxillary infections. ENT and respiratory tract, bone and joint infections.

NOPRILAM: fortified amoxil (Bial)

PENICILLIN V: Phenoxymethylpenicillin, similar spectrum to benzyl penicillin, effective for dento-alveolar abscess.

RETENS -DOXYCYCLINE: respiratory tract infections, ENT, Periodontal disease, skin and soft tissue infections, stomach and intestinal infections.(Chiesi).

RELOX: Cefpodoxime Proxetil, sinusitis, tonsillitis abscess, pneumonia, cystitis(Aventis Pharma Ltd)

RODOGYL: metronidazole and spiramycin—oral and dental infections (Sanofi Aventis).

RULID-ROXITHROMYCIN: oral infections but not first choice.

TETRACYCLINE: periodontal disease.

ZITHROMAX-ERYTHROMYCIN AND AZITHROMYCIN: used for endocarditis prophylaxis in children).

The Pharma.MT Fittydent event at Westin

LECTURE BY MR EWALD SCHMITT, President ,CEO
organised by Pharma MT and Fittydent International in
conjunction with DAM. An appraisal by Dr David Muscat

FITTYDENT

Fittydent has a clearly defined Unique Selling Proposition as the denture adhesive is NON WATER SOLUBLE and specifically designed for lowers.

It is a healthy adhesive as it does not get to the stomach. It is good for flat and narrow lower jaws.

The adhesive cushions provide a strong severe bond, and is highly effective for patients with excessive saliva.

A dispersible tablet with a PH of 9 is required to remover the cream from the cushion, and this does not corrode the metal components of a denture .

There are 3 applications of Fittydent – plastic, metal dentures and also orthodontic braces.

Fittydent has both a suction and a bonding effect. Fittydent is made up of two components:

1. Polyvinylacetate (chewing gum)
2. CMC (cellulose)

The cellulose absorbs water so as to keep the gum dry so the latter can stick to the gum. The material remains stuck to the denture only.

Fittydent is also free of taste and has a strong and long lasting bonding effect. No food particles get trapped under the denture. One application

only needed per day resulting in lower cost for the patient.

NATUR-DENT

A new toothpaste empowered by nature with enzymes derived from pineapple and papaya. These proteolytic enzymes break down the pellicle.

- a. MISWAK- used for 1400 years and contains 90 natural substances beneficial to oral hygiene.
- b. NEEM-antibacterial-works against gram positive and negative bacteria. It inhibits Streptococcus Mutans.
- c. XYLITOL- natural sweetener

Clinical studies have shown a change in tooth shade from D3 to A3 using this product.

With this toothpaste there is no bleach, nor chemical derivatives. Natur-Dent prevents caries, removes stains and eliminates bad breath.

It also contains 1490 ppm fluoride. It improves oral hygiene.

It has a low abrasiveness .The RDA is 51. It strengthens gums and prevents tartar build up.

The product was originally successfully launched in Scandinavia and will now be launched in the rest of Europe and beyond.

DENTIFRICES THE LATEST RESEARCH

A RANDOMISED CLINICAL TRIAL comparing the inhibition of plaque using two different toothpastes by Bellamy, Khera, Day, Barker and Mussett. Journal of contemporary dental practice 1 March 2009

AIM

The trial was to compare the plaque inhibition of a sodium fluoride (1450ppm)/potassium nitrate dentifrice versus a stabilized stannous fluoride (0.454%)/sodium hexametaphosphate/sodium fluoride positive dentifrice SnF2/SHMO with 1450ppm F.

METHOD AND MATERIALS

25 subjects were used in a two period, two treatment double blind crossover sequence using the BLEND A MED EXPERT GUM PROTECTION DENTIFRICE and another dentifrice. A standard manual toothbrush was used.

Digital plaque image analysis (DPIA) was used on 3 consecutive days to evaluate:

1. Overnight plaque formation AM PRE BRUSHING
2. Following 40 seconds of brushing AM POST BRUSHING
3. Mid afternoon PM

Images were analysed using an objective computer algorithm to calculate the total area of visible plaque. A 4 day washout period was used for the crossover phase.

RESULTS

All the subjects completed the study. The Stannous fluoride/sodium hexametaphosphate dentifrice provided statistically significantly lower levels of plaque area coverage versus the sodium fluoride/potassium nitrate dentifrice.

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When to Retreat

When a patient presents with symptoms associated with a previously endodontically treated tooth, several options exist for treatment—nonsurgical endodontic retreatment, endodontic surgery, or extraction. To determine the most appropriate treatment option, several factors need to be assessed before initiating treatment. These factors include the patient's chief complaint and presenting symptoms, evaluation of the prior endodontic and restorative treatment, the prognosis for the proposed treatment and of course, the patient's desires.

Symptoms associated with a previously endodontically treated tooth may include sensitivity to temperature, biting, pressure, palpation and the presence of a sinus tract or swelling. With the presence of these symptoms in an endodontically treated and restored tooth after years of being asymptomatic, endodontic treatment compromise should be suspected. Compromise is a better term than failure until the etiology can be identified.

Most cases of endodontic treatment compromise or failure are related to a contaminated root canal space. The causes of this compromise or failure include missed root canal spaces, inadequate obturation, perforation and coronal leakage. Missed root canal spaces and inadequate obturation should be considered as true endodontic failures due to the inadequacy of the original treatment. Perforations, coronal leakage and fractures should be considered as endodontic compromise due to either periapical breakdown due to an iatrogenic cause or recontamination of the root canal space due to coronal leakage and decay.

When deciding to nonsurgically retreat a case, the previous endodontic and restorative treatment must be evaluated. This evaluation needs include a thorough radiographic and clinical examination.

Radiographic examination should include any past radiographs as well as current radiographs angulated from

the mesial, distal and straight on of the tooth in question. Bite wing radiographs are also an important view. All these different views are helpful in identifying missed canals, abnormal root canal anatomy, fractures and perforations.

Missed canals can be observed radiographically when the obturation does not appear to be centered in the root. Since roots develop around a centrally located pulp, an eccentrically located obturation can indicate a missed canal. In the case of roots known to have multiple canals, the presence of only one obturated canal can be indicative of an untreated canal.

This is best determined with the angled radiographs which also help to determine if the untreated canal is to the facial or lingual.

Short fills, voids, separated instruments, evidence of endodontic surgery without retrograde restorations or with retrograde restorations not in the canal and the presence of silver cones can all be determined radiographically.

Perforations can be quite obvious or not. A radiolucent area adjacent to the apical extent of a post, a lateral radiolucent area on the furcation side of a root, a furcation radiolucency or a sinus tract tracing to the furcation can be indicative of a perforation.

Root fractures are often difficult to diagnosis. These fractures extend from the crown into the PDL space. These fractures can be just into the coronal PDL space or extend the entire root length. Radiographically, fractures may be difficult to visualize. Their presence is often indicated by a vertical line noted between the obturation material and the canal wall or a "halo" shaped radiolucent area surrounding the root.

A fracture which has just begun to affect the PDL space can be possibly noted radiographically by a narrow angular bone defect in the interproximal area. Changing the angulation of the radiographs both vertically and horizontally can aid in fracture

visualization. Also, fractures tend to develop in area of natural cleave lines within the tooth, mesial and distal marginal ridge areas and grooves between cusps.

The clinical examination for endodontic retreatment consideration includes evaluation of the coronal seal, periodontal status and for fractures.

A good coronal seal is very important to the overall success of any endodontic treatment. When this seal is violated, recontamination of the root canal space occurs leading to compromise of the endodontic treatment or "endodontic failure". The coronal seal can be violated by caries, cracks, fractures or poor or loose restorations. Inadequate crown margins can allow for leakage under the crown and recurrent decay. Loose crowns and bridges can often be identified by the presence of bubbles along the crown margins when pressure is applied on the occlusal surface of the restoration. This can best be visualized with magnification.

Thorough periodontal probing is essential in the clinical evaluation process. The periodontal probing needs to include the entire tooth and its furcations. An endodontic failure can be misdiagnosed as periodontal disease and the opposite is true as well. Periodontal probing of the entire quadrant is also recommended. When the overall periodontal health is good, finding an isolated, narrow and deep periodontal pocket over the root surface is usually indicative of a fracture or possibly a sinus tract.

Another indication of a fracture/crack just into the PDL space is sharp pain to gentle periodontal probing which is elicited in one specific spot and not present elsewhere around the tooth. This is usually found in the interproximal area.

This probing may cause a lasting throbbing discomfort similar to the patient's chief complaint with the tooth. Periodontal probing can also identify those perforations which communicate with the gingival sulcus.

These perforations have an unfavorable prognosis for treatment. The key to fracture and crack identification is visualization either by transillumination or by staining with a dye.

At times both may be needed. Transillumination can be accomplished with a light source specially designed for this purpose or a curing light can be used with appropriate eye protection.

A crack or fracture is indicated when the light transmission is halted at the fracture with a darkened interface noted. Crowns and large restorations may limit the usefulness of transillumination. Staining with methylene blue or any appropriate dye, such as caries indicator, may help to elucidate the fracture.

Placing the dye in the gingival sulcus of heavily restored teeth and then gently reflecting the gingival tissue away from the tooth can aid in identifying cracks and fractures. This is another time when magnification can be of great benefit.

The presences of multiple sinus tracts that trace to the same root are indications of a root fracture. These sinus tracts are often found on the facial and lingual aspects of the tooth.

Generally these are located closer to the gingival margin than those associated with endodontic pathosis. The presence of isolated narrow periodontal defects on both the facial and lingual aspects of the root indicates complete root fracture facial to lingual.

The past dental treatment history of the tooth can be of great importance in the diagnostic process. Why was the original endodontic treatment performed—caries, cracked/fractured tooth or previous endodontic treatment? The answer to these questions can aid in the diagnosis, treatment planning and prognosis for any proposed treatment.

After all the pertinent information has been gathered and analyzed, a diagnosis can be rendered and prognosis for endodontic retreatment can be offered.

A good prognosis for retreatment can be given in the following cases:

- inadequate obturation
- missed or untreated root canals
- coronal leakage
- silver cones
- separated instruments
- perforations coronal to the attachment apparatus
- perforations in the coronal to mid root area without communication through the gingival sulcus
- apicoectomies without retrograde restorations or retrograde restorations placed in the root but not in the canal.

A poor prognosis is given for:

- any and all cracks or fractures that involve the PDL space whether supracrestal or infraosseous
- perforations with sulcular communication
- apical third root perforations in roots with sharp apical curvatures. These are best reserved for a surgical approach since it is often very difficult to locate the original canal.

There are several factors that make nonsurgical endodontic retreatment the preferred treatment method for treating compromised endodontic treatment and endodontic failures.

Whenever possible, retaining the original tooth and supporting bone is the best option for the tooth and patient.

When discussing a comprehensive retreatment plan, the patient needs to be informed of the status of the existing endodontic and restorative treatment, reasons for retreatment, prognosis for retreatment and the potential for any additional treatment procedures such as a new restoration, crown lengthening and for the possible need for endodontic surgery. The most important consideration before initiating any retreatment is the informed patient's desires—Retreat or extract.

GRANDIO AND GRANDIO FLOW RESEARCH – A SUMMARY

By Dr David Muscat

A very high filler content = lower resin content = less shrinkage. Variation of sphere sizes to fill in gaps between spheres = concept of hybrid composites. Nano particle size equivalent to size of smallest bacterium.

In Grandio the glass ceramic micro-fillers are added to a pre filled base. Surface-modified nano particles are uniformly embedded in a resin matrix and function as highly effective cross linkers that lend additional stability to the resin matrix. In Grandio the filler content is 87% w/w% (71.4% vol).

Resin filler is 1:6.7 as opposed to 1:4 in traditional hybrid composites. In Grandio flow there is a filler content of 80%.

Grandio is thixotropic, so can be easily shaped without pressure.

PROPERTIES OF GRANDIO

1. Chameleon effect
2. High flexural strength
3. The modulus of elasticity is close to dentine and in an area of value for enamel, so the material functions like the remaining tooth substance under stress, and is well suited for posterior teeth.
4. Fracture toughness, due to low water absorption due to high filler content.
5. High edge stability due to excellent cross-linking.
6. Abrasion resistant, so good durability of polished material.
7. Low polymerization shrinkage with a tooth-like thermal expansion in situ. The stress on cavity walls is reduced. A durable restoration with tight marginal seal when used with Futurabond or Solobond.
8. Compatible with self-etch and total etch bonding. Low shrinkage affords good margin quality.
9. Grandio flow is also very strong but is flowable.
10. A high bio-compatibility and low bacterial colonization.

AN OVERVIEW OF PHARMACOLOGICAL MANAGEMENT IN GENERAL DENTAL PRACTICE

By Dr Adam Bartolo – THE CATAFAST LECTURE EVENT AT INTERCONTINENTAL HOTEL.

sponsored by Novartis. Summarized by Dr David Muscat.

CAUSES OF OROFACIAL PAIN

ACUTE

- intraoral-tissues supporting teeth, oral mucosa, alveolar bone.
- extraoral causes-psychosomatic, ears and eyes, TMJ, muscles of mastication, salivary glands, vascular, maxillary sinuses.

DENTAL HYPERAESTHESIA

Hydrodynamic theory, movement fluid within dentinal tubules causes deformation of both odontoblast process and adjacent nerve fibres.

DESENSITISING AGENTS

Sodium Fluoride-makes dentine more resistant to decalcification, and may lead to increase in secondary dentine formation, thus blocking dentinal tubules.

Stannous Fluoride-similar to sodium fluoride but the tin element may also inactivate enzyme activity in the odontoblast process.

Strontium chloride-the strontium ions have strong affinity for calcified tissues. Accelerates rate of calcification, obliterates dentinal tubules.

Potassium Nitrate-desensitizes dentinal nerve endings, and requires continuous usage. It is found in most desensitizing products.

TOPICAL AGENTS FOR MANAGING MUCO-GINGIVAL PAIN AND DISCOMFORT

Topical NSAIDs:

- stabilize cell membranes preventing release of arachidonic acid, which starts inflammatory process.
- Inhibit cyclo-oxygenase, reducing synthesis of prostaglandins.
- good for gingivitis, stomatitis.

OTHER PRODUCTS

- Benzylamine hydrochloride Tantum Verde, Difflam
- Ketoprofen lysine salt-OKI
- Choline salicylate- Bonjela – not recommended as aspirin risk of Reye's syndrome under age 16. (severe metabolic disorder with brain damage)

SALICYLATE BURN may occur with aspirin tab used for topical pain relief. A burn may also occur with eugenol.

TOPICAL ANAESTHETICS – LIDOCAINE

- Dentinox teething gel
- Xylonor spray
- Xylocaine spray
- Anginovag
- Trachisan lozenges
- BENZOCAINE – spray, lozenges (dequacaine), gel (coracaine)

IMPORTANT – benzocaine is an ester type so there is a greater risk of allergies, and also with a high oral dose a risk of methaemoglobinemia.

The patient must never be given anaesthetic lozenges if alcohol has been consumed and patient going to bed as if the patient vomits there is a reduction in the efficacy of the gag reflex.

TOPICAL STEROIDS

- Hydrocortisone acetate spray – Anginovag
- Beclometasone spray – Becotide inhaler (without spacer)
- Dexamethasone mouthwash (only in hospital and made to order by crushing tablets)
- Triamcinolone in oromucosal paste- Adcortyl in Orabase.

SYSTEMIC ANALGESICS

- Paracetamol
- Co codamol – paracetamol and codeine-Solpadeine plus

- Co proxamol – paracetamol and dextropropoxyphene, Distalgesc, Medonol (Codeine not good for dental pain. DF118 not available in UK – dangerous drug – as it has a narrow therapeutic action, a strong action with alcohol)
- Paracetamol and orphenadrine citrate-Norgesic – this is used for myofascial pain as it is a muscle relaxant and has no anxiolytic or psychosomatic effects.

NON-STEROIDAL ANTI-INFLAMMATORY DRUGS

- Aspirin- Aspro
- Ibuprofen-Irifen, Brufen, Nurofen
- Dexketoprofen-Keral
- Mefenamic acid- Alfoxan. (least anti-inflammatory effect-better to use cataflam instead which has a good safety profile)

The above all have the same side effects of gastric irritation.

OTHERS:

- NSAIDs
- Tiaprofenic acid
- Piroxicam
- Naproxen
- Diclofenac Sodium-Voltaren, Voltaren D
- Diclofenac Potassium – Catflam, Catafast. The potassium salt is more rapidly absorbed and so gives better efficacy as it reaches a higher peak in plasma concentrations

COX-2 SELECTIVE NSAIDS

- Etoricoxib (Arcoxia), Celecoxib, lumiracoxib, Nimesulide. (Remov), meloxicam (Mobic)
- OPIOIDS – not so good for dental pain.
- Codeine, DF118, Tramadol, Morphine.

Opioids cause constipation, nausea, vomiting, cardio-respiratory depression-related to dose of the drug.

THE PALLIATIVE PATIENT

Morphine is started with 5-10mg for severe pain relief -this is equivalent to 1 gram of paracetamol, as a standard starting dose. Morphine solution works faster so this is added to the tabs dose and one allows patient to get used to it till required dose achieved, and one tops up with a 5mg solution.

MORPHINE CANNOT BE CRUSHED OR CHEWED AS THERE WILL BE A SUDDEN RELEASE. Once you achieve the right dose you convert the tab+soln to tablets.

ACUTE INFECTIONS

- Pericoronitis-local measures best plus NSAIDS
 - Dry socket-alvogy, BIPP gauze, ZOE pack.
 - ANUG-metronidazole,H2O2, benzocaine, systemic analgesics.
- Sinusitis-antibiotics, decongestants, antihistamines.
- Herpes – HSV1-AND VZV-soft diet, fluids, topical antiviral or systemic antiviral if immunocompromised.

RESCUE ANALGESIA

ie what to give if patient gets pain in between analgesic doses:

1. NSAIDS+PARACETAMOL+/- Opioid
2. Morphine +morphine solution.

CATAFAST PRESENTATION

By Mr Jean Pierre Miceli from Novartis

Catafast works within 13 minutes. Cataflam within 45 minutes and Voltaren within 2-3 hours. When taken use a small amount of water and avoid carbonated drinks which may interfere with its action.

There is a nice aniseed taste. Catafast can be compared to an IM analgesic injection. It is indicated in post traumatic pain, inflammation and swelling and migraines and toothache. There is a 91 per cent tolerability with Catafast. It is absorbed within 4 minutes of ingestion, and the onset of action is within 5 minutes with a peak plasma concentration at 13 minutes.

The World's fastest just got faster.

THE VOCO LECTURE

By Mr John Fanning, Voco consultant

Summarized by Dr David Muscat

Mr John Fanning took us on a journey of marvels of German technology gift wrapped in six pandora boxes straight from their launch at the International Dental fair in Cologne six weeks earlier.

NON-DRIP TECHNOLOGY

An innovative way of saving up to 15% of material otherwise wasted. The plunger has a suck-back mechanism so you do not get the drip at the nozzle end.

Material can be dispensed and precisely placed. Grandioseal, Grandioflow and Ionoseal are all delivered in this fashion.

BIFIX is a dual-curing, self adhesive, luting composite. It is estimated that the operator will save a lot of time as there is no need for an adhesive or conditioner stage. The material self cures at 37 degrees within 4 minutes. Working time is 2 minutes and intra-oral working time is 30-60 seconds.

NEW ENDO-TIPS allow direct application for post cementation, and are up to 2mm diameter. Bifix is available in transparent, universal and white opaque shades.

The Bifix adheres to dentine and enamel without the need for light curing. There is a normal film thickness of 10 microns.

IONOLUX is a light-cured glass ionomer which is used as a stand-alone product with excellent aesthetics and durability.

AMARIS GINGIVA replaces **COMP-NATUR** for the restoration of gingivae. It comes in 4 shades allowing the dentist to restore the cervical areas of teeth with the correct gingival colour.

THE VOCO REBUILDA POST KIT is a very user-friendly kit presented in a stage by stage box where everything

in it is compatible and interacts with the other. The Rebuilda and post are made from the same material and the Futurabond and silane bonding in the post work in harmony with these. The materials are all radiopaque.

The endo posts are tapered at 35 degrees so eliminating trapped air bubbles. The bottom of the post is conical and anatomically shaped to better allow post placement in the root. Work is 'in progress' with no time wasting.

BIFLUORID 10 is a fluoride varnish used to treat hypersensitivity. It is transparent, dries fast and adheres to both enamel and dentine with sustained dentinal tubule sealing.

The sodium fluoride provides immediate relief while the calcium fluoride provides long term relief (do not rinse for 45 mins after). It also contains ethyl acetate, cellulose ester and eugenol.

After cleaning area the material is applied with a sponge at the end of a red tip applicator.

Voco have the patent for their excellent blister pack presentation. The Bifluorid 10 can be used before and after in office bleaching procedures.

A waterproof insulating protective coating is formed against thermal and chemical stimuli.

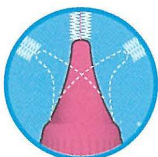
The material can also be used on cervical areas and crown margins, post deep scaling and sealing cavity margins.

The Voco plastic composite placement instrument has a robust plastic end on one side. The other side resembles the antennae of an insect, with one ball ended side for shaping and finishing and one flat ended side for packing.

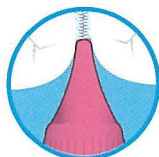


Interdental Cleaning – the easy way

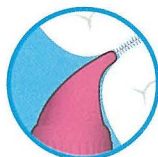
- Eight colour coded sizes
- Plastic coated wire
- User-friendly handle
- Developed in collaboration with Swedish dental professionals
- Now available with the new-generation G2 improved brush head on selected products



Improved Durability



Improved Access



Easier to Use

Made in Sweden

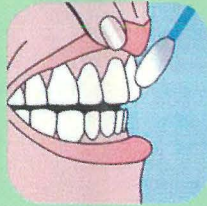


New flexible
G2™ neck

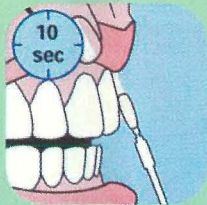
SUNSTAR



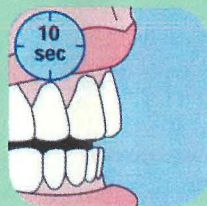
STEP 3
CUSTOM CARE



Swab

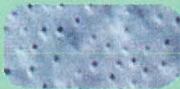


Apply



Dry

Tooth Surface



Before Application



After Application

NEW GUM® Sensi Pro™ (Desensitizer)

For the treatment of hypersensitive tooth surfaces.
Lasts up to 6 months.



Sensitivity generally occurs when gums recede and cementum is not present. As gums recede, the underlying root of the tooth and dentinal tubules are exposed. GUM® Sensi Pro™ desensitizer is indicated for:

- Treatment of tooth sensitivity, for use before or after bleaching procedures.
- Treatment of sensitivity occurring after professional tooth cleaning, scaling and root planing procedures.
- Treatment of hypersensitive root surfaces.

GUM® Sensi Pro™ desensitizer is a two-part chemistry – a liquid and a crystallized brush. The liquid becomes activated when the brush applicator is stirred in the liquid. It is easy to apply and can provide desensitization up to 6 months.

GUM® Sensi Pro™ desensitizer protects the tooth in two ways:

- Calcium and protein are precipitated to block dentinal tubules.
- Protective varnish seals tooth surface on the outside.

SUNSTAR



New

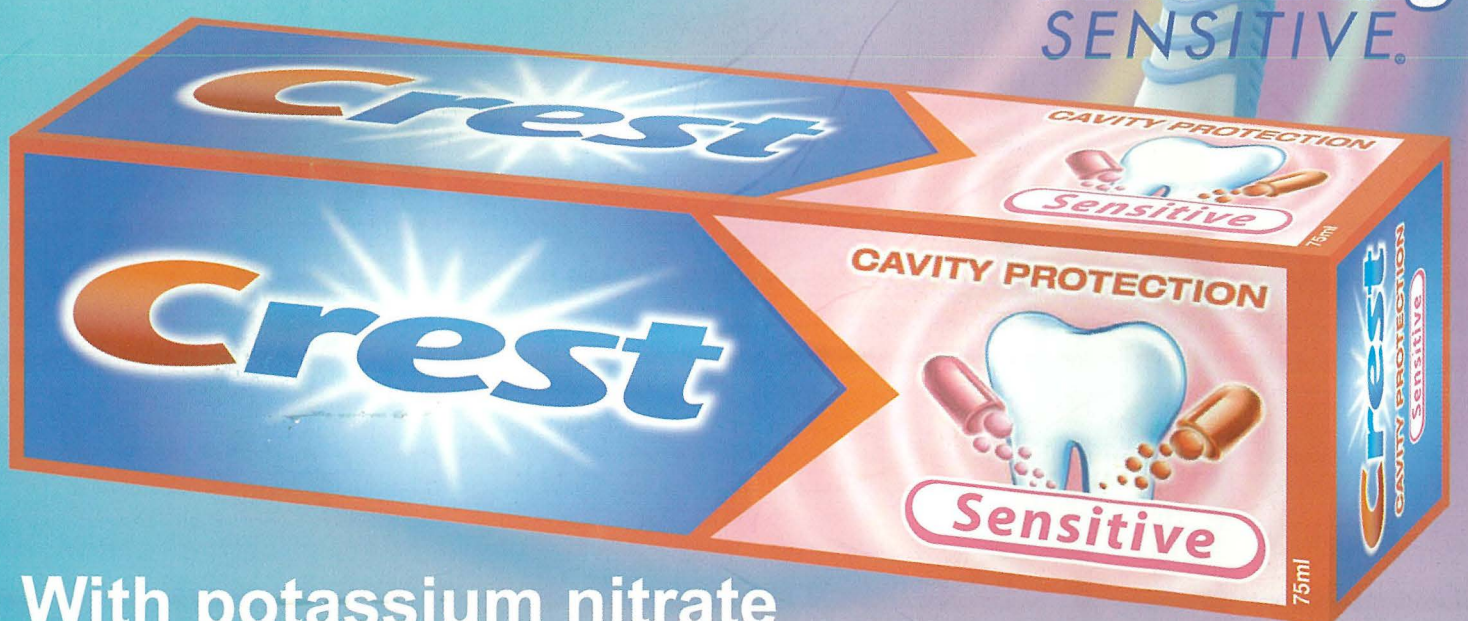


SENSITIVE

Helps protect
sensitive teeth
and gums



Oral-B®
Advantage
SENSITIVE.



With potassium nitrate