

# THE DENTAL PROBE

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

*Issue No. 21*

*December 2006*



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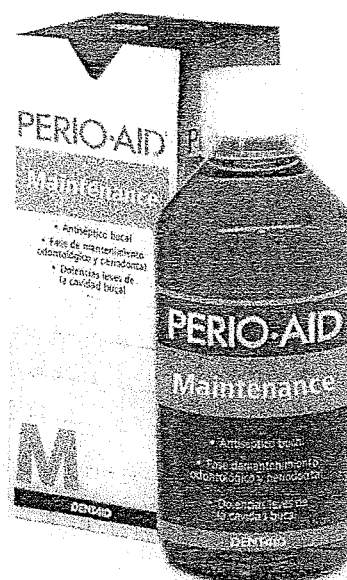
Dental Association of Malta - The Professional Centre, Sliema Road, Gzira GZR 06  
Tel: 21 312888 Fax: 21 343002 Email: [mfpb@maltanet.net](mailto:mfpb@maltanet.net)



**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  |

## An Innovation in Interdental Cleaning

Cleaning between teeth has never been easier...  
With Proxabrush® Click from Butler GUM

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

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

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clinically proven to keep brushes  
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system.

**Proxabrush® Click**  
interdental brush

Trade Enquiries: BIOSPHERE LTD. - William H. Prescott Street, Ta'Gorm - Tel: 21875471



Dear colleagues,

Well folks it has been a great year with many events organised by the dental profession.

We have had a record number of members, 118 today as I write this letter. We need young new members to help us organize events and help with the Probe. Only a handful of people are active and we get people who criticize but then they never help when put on the spot. Those who say that I am too forthright in my approach I say –look at our results.

Those who play cat and mouse to dodge paying 20liri membership please note you can claim this as a tax-deductible expense, and really, are we asking so much?

This issue is dominated by the great lecture by Dr Lapira on Atypical Facial Pain. I was going to serialize it, but I think it is much better presented as one.

We have had great foreign and local speakers, such as Prof Ibbitson, Dr Smith, Dr Wise and Mr Alex Manche and Dr Adam Bartolo amongst others. The DAM-our journey continues.

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

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#### DAVID'S TOP 10 TIPS OF THE MONTH

1. Fold a piece of X-ray lead foil into four and snip a 2mm diameter hole into it. One can then spot cure the centre of a veneer so one can trim excess cement off.
2. KY jelly can be used to hold veneer onto the tooth at try in stage.
3. Lead foil can be used as a framework onto which to add acrylic and a new tooth onto a partial denture.
4. KY jelly can be used to moisten the rubber seal of the autoclave.
5. Plumbers tape can be used to separate veneers during cementation.
6. When building up teeth, the ratio of an upper central to an upper lateral incisor is 1.6:1.
7. Restoring canine guidance is probably more important to see to first rather than restoring wear on posterior teeth.
8. Always put some alvogyl into a socket after a difficult extraction. Dry-sockets post-op will be avoided.
9. One can use petroleum jelly to exclude air when cementing a crown with panavia.
10. When making bilateral bridges, just do one quadrant at a time, possibly leaving one tooth as an occlusal stop. Fit bridge on one side and then work on the other side.

## Atypical Facial Pain: A Clinical Conundrum

Alec LaPira MD, Au.D, FAAA,  
MA [Leeds], MSc [Lon], DLORCS [Eng].  
Ass. Prof. ENT Disorders, Nova University, Florida.  
Fellow Amer. Ac. Audiology/ Fellow ARO

## Referred Pain

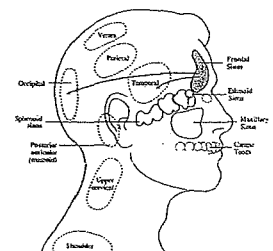
- Brain tissue insensate
- Anterior & middle fossae → anterior to coronal suture
- Posterior fossa → occipital and upper neck
- Sphenoid & sella → vertex

## Sinus Innervation

- Ophthalmic and maxillary branches of 5<sup>th</sup> cranial nerve
- Greater superficial petrosal branch of 7<sup>th</sup> cranial nerve
- Ostiomeatal complex > turbinates > septum > sinus mucosa

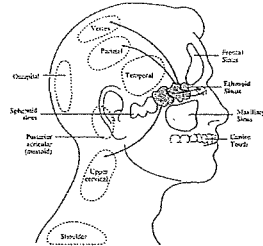
## Frontal Sinus

- Ophthalmic branch of 5<sup>th</sup> cranial nerve
- Pain referred to forehead and anterior cranial fossa



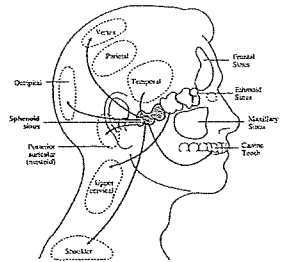
## Anterior Ethmoid

- Ophthalmic division
- Anterior ethmoid nerve off nasociliary
- Anterior septum, turbinates, ostiomeatal complex



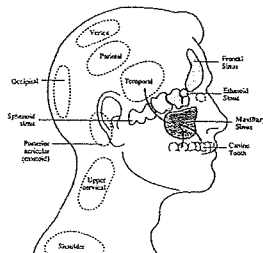
## Posterior Ethmoid and Sphenoid

- Maxillary division
  - Posterior ethmoid nerve
  - Posterior septum, parts of superior and middle turbinates
- Ophthalmic division
- Greater superficial petrosal nerve



## Maxillary Sinus

- Maxillary division of 5<sup>th</sup> cranial nerve
  - Posterior superior alveolar
  - Infraorbital
  - Anterior superior alveolar



## Referred Otalgia

- Oral cavity
  - Mandibular division of 5<sup>th</sup> cranial nerve
  - Auriculotemporal nerve
- Pharynx
  - Jacobson's branch of 9<sup>th</sup> cranial nerve
- Hypopharynx and supraglottic larynx
  - Arnold's branch of 10<sup>th</sup> cranial nerve



# Health & Beauty

TRISA is the leading Swiss producer of tooth and oral care products.

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The four Trisa Clinical toothpastes are high quality Swiss products, developed in close cooperation with Swiss universities which enjoy an excellent reputation in the field of preventive dentistry. When using the Trisa Clinical toothpaste regularly you offer your teeth an optimal protection against caries and much more.

The TRISA Clinical CARE 2 in 1 toothpaste will be your active partner in the prevention of dental decay. A unique combination of active ingredients including fluoride helps achieve an optimal protection. TRISA Clinical CARE 2 in 1 contains fluoride and special particles against caries, strengthens the gums, reduces plaque, reduces the formation of tartar and provides fresh breath.

The TRISA Clinical WHITE toothpaste for teeth whitening with Bioperoxide helps your teeth efficiently fight the stains of pigments. TRISA Clinical WHITE fights the formation of plaque and tartar and holds up of active fluoride against caries.

The TRISA Clinical ACTIVE toothpaste fights the formation of plaque - the main cause of gum problems - and strengthens the gums thanks to Astringent, Eucalypt and Permethol. Very gentle toothbrushing thanks to a special formula. Additionally, fluoride strengthens the tooth enamel and thereby makes teeth more resistant against caries.

The TRISA Clinical Fresh GEL fights against dental plaque and tartar and provides fresh breath. TRISA Clinical Fresh GEL provides long-lasting fresh breath.

\*Fluoride already active

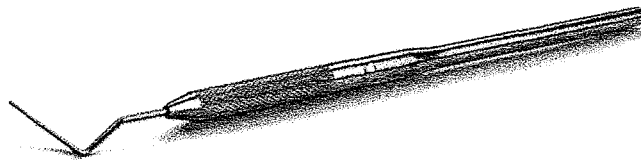
**Trisa**  
OF SWITZERLAND

All TRISA Clinical toothpastes have been developed in cooperation with Swiss universities. The effectiveness has already been proven.

Trade Register: WZB 170, 74 200/000



When you diagnose sensitivity



You need the right tool to fight it

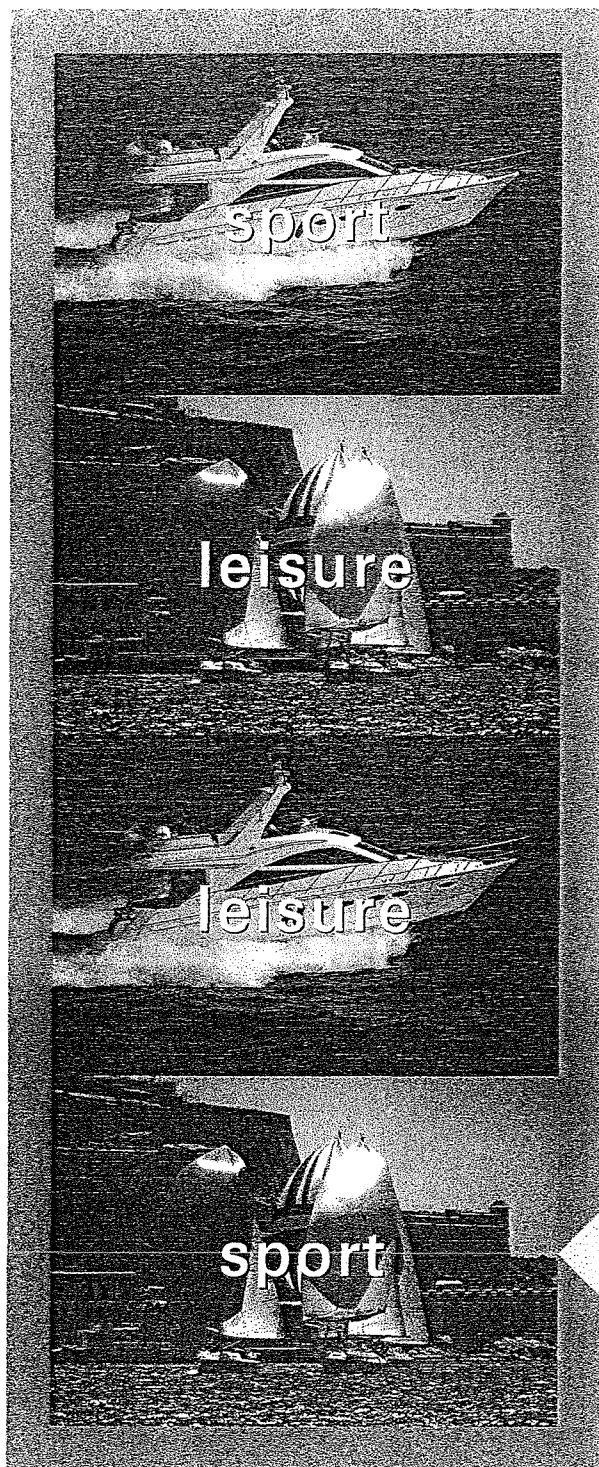


**UNBEATABLE SENSITIVITY RELIEF + COMPLETE CARE**

**+ FRESH BREATH + GREAT TASTE**

**Colgate Sensitive** *Everyday protection from sensitivity*





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## Yacht Finance

New, simple inexpensive

Motor or sail? Do you want to challenge the wind or speed off into the sunset? We've made buying a boat plain sailing.

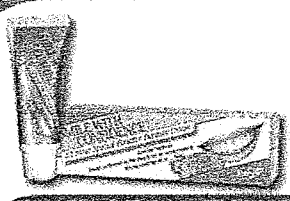
At HSBC Bank Malta p.l.c. we understand that everybody has different dreams, so no matter what type of boat you're thinking of buying, our Yacht Finance can help you make your dreams reality.

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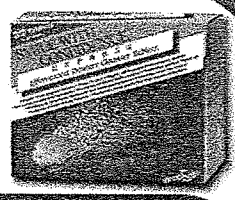



**BONYPLUS® 12 Hour Special Fixative Denture Cream™** is not an ordinary denture adhesive cream. Its advanced formulation reacts to saliva to provide a super strong hold between your denture and your gums - lasting up to 12 hours.

**BONYPLUS® 12 Hour Special Fixative Denture Cream™** will bring back your patient's confidence and comfort when eating, talking or sneezing.

**BONYPLUS® Express Effervescent Denture Cleanser Tablets™** makes the daily cleaning of the denture simple and effective. A combination of active oxygen and wash-active substances removes plaque, impurities, food remains, nicotine, tea, coffee and other stains.

The tablets work in just 3 minutes, and is safe to use on metallic denture parts.





Dentures are made of porous material in which micro-organisms can infiltrate and build up, eventually causing denture stomatitis as well as other infections.

*Candida albicans* is one of the main causes of denture stomatitis and cannot be removed easily by everyday denture cleansers.

**BONYPLUS® Medical** is specially formulated to prevent or treat Bacterial or Fungal infections on the dentures, and is safe on metallic denture parts.

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### For Sale:

Dental chair, stool, equipment, instruments etc.

Phone Dr. Charles Boffa on Tel. No. 21826841

### Change of Address

Please let us know immediately when you have a change of address, because we are having some circulars returned to us marked unknown. Either inform some committee member, or better still, phone the Permanent Secretary, on 21312888 in the morning and she will see to it immediately.

Email: [mfpb@maltanet.net](mailto:mfpb@maltanet.net)



## History

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- First occurrence
- Timing
- Quality
- Treatments
- Associated symptoms
- Precipitating factors



## Past Medical History

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- Head injuries, infections, surgeries
- Psychiatric diagnoses
- Medications
  - OTC analgesics
  - OCP
  - Herbal medications
  - Antihypertensives & vasodilators
- Alcohol, tobacco, drugs



## Physical Examination

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- Complete head & neck exam
  - Cranial nerves
  - TMJ & muscles of mastication
  - Scalp vessels
  - Trigger points
- Neurological exam



## Diagnostic Tests

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- EEG
- CT and/or MRI
- EMG
- TMJ radiography
- Cervical spine films
- Labs
- Psychometric testing

## Tension-Type Headache

- Most common headache syndrome
- Annual prevalence: 63% males & 88% females.
- Episodic < 15 days per month
- Chronic > 15 days per month
- 4 Q's pain [quality, intensity, location & duration]

## TTH - Characteristics

- 30 minutes to 7 days
- Pressing or tightening
- Mild to moderate pain
- Variable location, often bilateral
- Nausea and vomiting rare

## TTH - Treatment

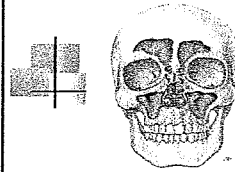
- |                                    |                           |
|------------------------------------|---------------------------|
| ■ Stress management                | ■ CTTH                    |
| ■ Biofeedback                      | ■ Abortive                |
| ■ Stress reduction                 | ■ NSAIDs                  |
| ■ Posture correction               | ■ ASA-caffeine-butalbital |
| ■ Medication rarely needed in ETTH | ■ Phenacetin              |
| ■ Benzodiazepines                  | ■ Preventative            |
| ■ amitriptyline                    | ■ Antidepressants         |
|                                    | ■ Muscle relaxants        |
|                                    | ■ NSAIDs                  |

## Migraine

- 17% of females, 6% of males
- Moderate to severe pain
- Unilateral, pulsating
- 4 to 72 hours
- Nausea, vomiting, photophobia or phonophobia
- With or without aura

## Prevalence

- Familial
- Young, healthy women; F>M: 3:1
  - 17 – 18.2% of adult females
  - 6 – 6.5% adult males
- 2-3<sup>rd</sup> decade onset... can occur sooner
- Peaks ages 22-55.
- 1/2 migraine sufferers not diagnosed.
- 94% pt's seen in primary care settings for HA have migraines



### Common misdiagnoses for migraine:

- Sinus HA
- Stress HA
- Referral to ENT/DENTISTS for sinus, dental disease and facial pain.

## Migraine Definition

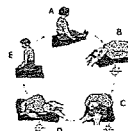
- IHS criteria: Migraine/aura (3 out of 4)
  - One or more fully reversible aura symptoms indicates focal cerebral cortical or brainstem dysfunction.
  - At least one aura symptom develops gradually over more than 4 minutes.
  - No aura symptom lasts more than one hour.
  - HA follows aura w/free interval of less than one hour and may begin before or w/aura.
- IHS Diagnostic criteria: migraine w/o aura
  - HA lasting for 4-72 hrs
  - HA w/2+ of following:
    - Unilateral
    - Pulsating
    - Mod/severe intensity.
    - Aggravated by routine physical activity.
  - During HA at least 1 of following
    - N/V
    - Photophobia
    - Phonophobia

History, PE, Neuro exam show no other organic disease.

At least five attacks occur

### Migraineurs more likely to have motion sickness.

- Half of Meniere's patients claim to have migrainous symptoms.
- BPPV







# Sterillium®

Alcoholic hand antiseptic exceptionally good skin tolerability even with long-term use excellent skin protection and skin care properties effective against a broad range of micro organisms and viruses very good residual and persistent effect.

Active ingredients in 100 g  
2-propanol 45.0 g,  
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Microbiological activity  
Bactericidal, fungicidal, tuberculocidal, virusinactivating: HBV, HIV, BVDV\*, herpes, papova, rota and vaccinia viruses.

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Sterillium® is an alcoholic rub-in antiseptic suitable for Hygienic and Surgical Hand Disinfection. The great advantage of the use of Sterillium® is that hand disinfection can be carried out anywhere, independently of a washbasin and water. The preparation is used in all areas where hygiene is important, such as wards (incl. sanitation areas), functional areas (operating theatres, intensive care units, infection departments), ambulances, laboratories, domestic services departments, cleaning services, medical practices of all disciplines, home-care of patients, old people and babies industry.

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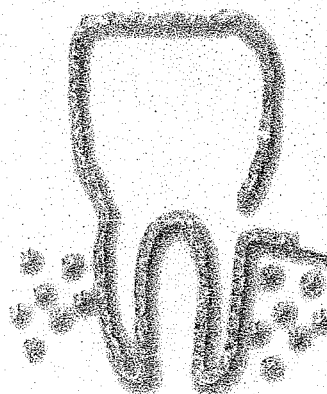
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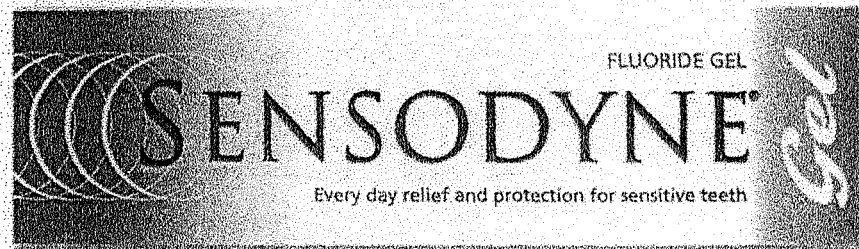


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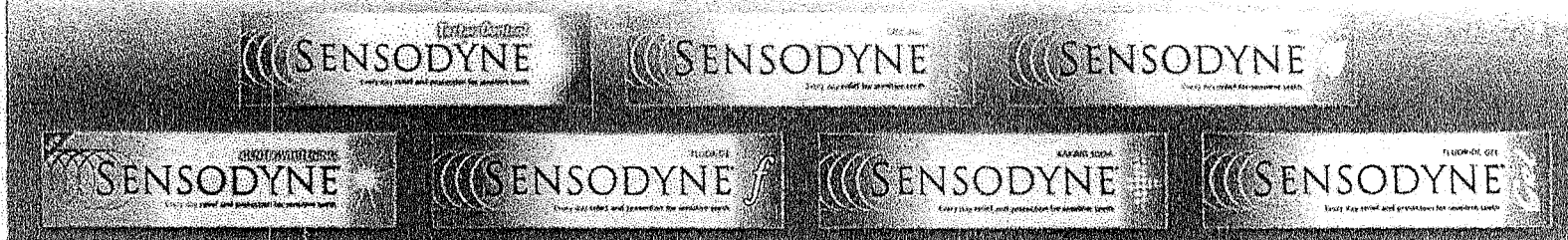
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# MILLIONS TRUST IT!

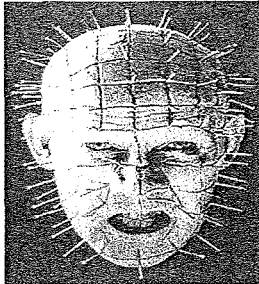


## DENTISTS RECOMMEND IT!

THE WORLD'S LEADING TOOTHPASTE  
FOR SENSITIVE TEETH

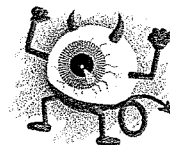


## Clinical manifestations



- Clinical manifestations
  - Lateralized in severe attacks – 60-70%
  - Bifrontal/global HA – 30%
  - Gradual onset with crescendo pattern.
  - Limits activity due to its intensity.
  - Worsened by rapid head motion, sneezing, straining, constant motion or exertion.
  - Focal facial pain, GI dysfunction, facial flushing, lacrimation, rhinorrhea, nasal congestion and vertigo...

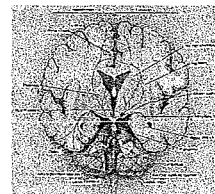
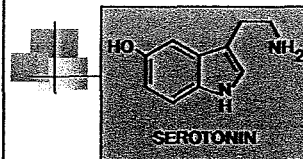
- Auras
  - Vision – most common neurologic symptom
  - Paraesthesia of lips, lower face and fingers... 2<sup>nd</sup> most common
  - Typical aura
    - Flickering uncolored zigzag line in center and then periphery
    - Motor – hand and arm on one side
    - Auras (visual, sensory, aphasia) – 1 hr
- Prodrome
  - Lasts hours to days...



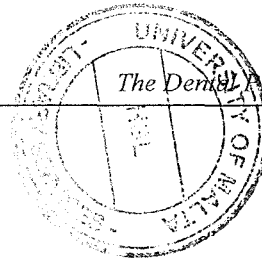
## Migraine mechanism



- Neurovascular theory.
  - Abnormal brainstem responses.
  - Trigemino-vascular system.
    - Calcitonin gene related peptide
    - Neurokinin A
    - Substance P
- Extracranial arterial vasodilation.
  - Temporal
  - Pulsing pain.
- Extracranial neurogenic inflammation.
- Decreased inhibition of central pain transmission.
  - Endogenous opioids.

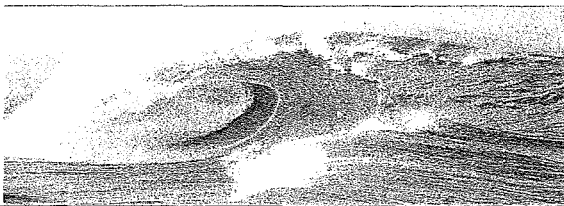


- Important role in migraine pathogenesis.
- Mechanism of action in migraines not well established.
- Main target of pharmacotherapy.

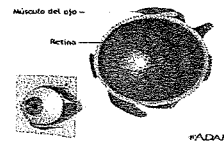
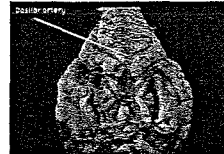


## Aura Mechanism

- Cortical spreading depression
  - Self propagating wave of neuronal and glial depolarization across the cortex
    - Activates trigeminal afferents
      - Causes inflammation of pain sensitive meninges that generates HA through central/peripheral reflexes.
    - Alters blood-brain barrier.
  - Associated with a low flow state in the dural sinuses.



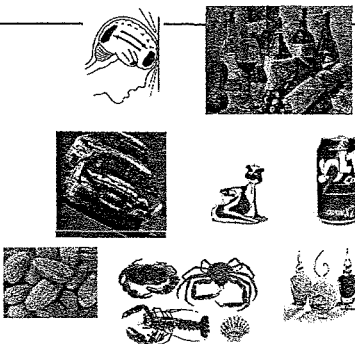
## Migraine Subtypes



- Basilar type migraine
  - Dysarthria, vertigo, diplopia, tinnitus, decreased hearing, ataxia, bilateral paresthesias, altered consciousness.
  - Simultaneous bilateral visual symptoms.
  - No muscular weakness.
- Retinal or ocular migraine
  - Repeated monocular scotomata or blindness < 1 hr
  - Associated with or followed by a HA

## Precipitating factors

- > stress
- > head and neck infection
- > head trauma/surgery
- > aged cheese
- > dairy
- > red wine
- > nuts
- > shellfish
- > caffeine withdrawal
- > vasodilators
- > perfumes/strong odors
- > irregular diet/sleep
- > light

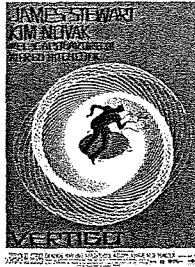


## Migraine Subtypes

- Menstrual migraine
- Hemiplegic migraine
  - Unilateral motor and sensory symptoms that may persist after the headache.
  - Complete recover
- Familial hemiplegic migraine



## Migrainous vertigo



- Vertigo – sole or prevailing symptom.
- Benign paroxysmal vertigo of childhood.
- Prevalence 7-9% of pts in referral dizzy and migraine clinics.
- Not recognized by the IHS
- Diagnosis (proposed criteria)
  - Recurrent episodic vestibular symptoms of at least moderate severity.
  - One of the following:
    - Current of previous history of IHS migraine.
    - Migrainous symptoms during two or more attacks of vertigo.
    - Migraine-predominant before vertigo in more than 50% of attacks.
- Response to migraine medications in more than 50% of attacks

## Migraine - Treatment

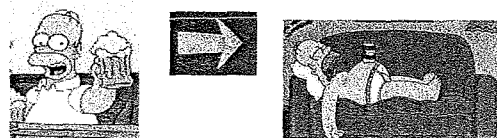
- Abortive
  - 5-hydroxytryptamine receptor agonists
    - *Imitrex*
      - Oral, SQ, nasal spray
    - *Maxalt*
    - *Zomig*
    - *Amerge*
  - Ergotamine
  - Butorphanol
  - *Midrin*
  - NSAIDs
  - Lidocaine

## Migraine - Treatment

- Symptomatic
  - Prochlorperazine
  - Dihydroergotamine
  - Chlorpromazine
  - Haloperidol
  - Lorazepam
- BOTOX?
- Preventative
  - Antidepressants
  - *Bellergal* (ergotamine)
  - NSAIDs
  - $\beta$ -blockers
  - Calcium channel blockers
  - Anticonvulsants: [topiramate, valproate]

## Treatment

- Abortive
  - Stepped
  - Stratified
  - Staged
- Preventive





## Abortive Therapy

- Reduces headache recurrence.
- Alleviation of symptoms
- Analgesics
  - Tylenol, opioids...
- Antiphlogistics
  - NSAIDs
- Vasoconstrictors
  - Caffeine
  - Sympathomimetics
  - Serotonergics
    - Selective - triptans
    - Nonselective - ergots
- Metoclopramide

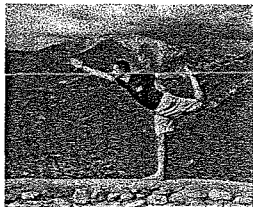


## Abortive care strategies

- Stepped
  - Start with lower level drugs, then switch to more specific drugs if symptoms persist or worsen.
    - Analgesics - Tylenol, NSAIDs...
    - Vasoconstrictors - sympathomimetics...
    - Opioids (try to avoid) - Butorphanol
    - Triptans - sumatriptan (oral, SQ, nasal), naratriptan, rizatriptan, zolatriptan.
  - Limited by patient compliance.
- Stratified
  - Adjusts treatment according to symptom intensity.
    - Mild - analgesics, NSAIDs
    - Moderate - analgesic plus caffeine/sympathomimetic
    - Severe - opioids, triptans, ergots...
  - Severe sx treatment limited due to concomitant GI sx's.
- Staged
  - Bases treatment on intensity and time of attacks.
  - HA diary reviewed with patient.
  - Medication plan and backup plans.

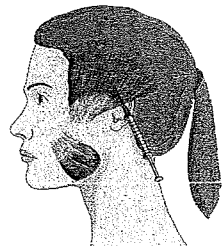
## Preventive therapy

- Consider if pt has more than 3-4 episodes/month.
- Reduces frequency by 40 - 60%.
- Breakthrough headaches easier to abort.
- Beta blockers
- Amitriptyline
- Calcium channel blockers
- Anticonvulsants.
- Lifestyle modification.
- Biofeedback.



## Botox

- 51% migraineurs treated had complete prophylaxis for 4.1 months.
- 38% had prophylaxis for 2.7 months.
- Randomized trial showed significant improvement in headache frequency with multiple treatments.



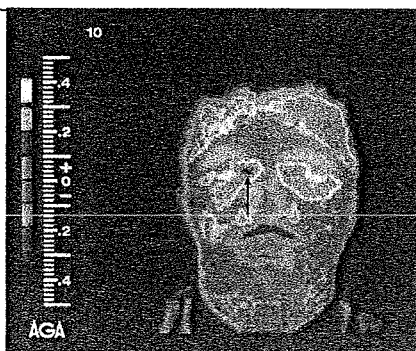
## Summary Migraine

- Migraine is common but unrecognized.
- Keep migraine and its variants in the differential diagnosis.

## •Cluster neuralgia/headache

- Intensely severe pain
- Unilateral
- Periorbital
- 15 to 180 minutes
- Nausea and vomiting uncommon
- No aura
- Alcohol intolerance
- Male predominance
- Autonomic hyperactivity
  - Conjunctival injection
  - Lacrimation
  - Nasal congestion
  - Ptosis

## Cluster



## Cluster

- Episodic
  - Two episodes per year to one every two or more years 7 days to a year
- Chronic
  - Remission phases less than 14 days
  - Prolonged remission absent for > one year



## Cluster - Treatment

---

- Preventative
  - Calcium channel blockers
  - *Bellergal*
  - Lithium
  - Methysergide
  - Steroids
  - Valproate
  - Antihistamines
- Abortive
  - Oxygen
  - 5-HT receptor agonists
  - Intranasal lidocaine



## Temporal Arteritis

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- Moderate to severe, unilateral pain
- Patients over 65
- Tortuous scalp vessels
- ESR elevated
- Biopsy for definitive diagnosis
- Treat with steroids
- Untreated complicated by vision loss



## Chronic Daily Headache

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- 6 days a week for 6 months
- Bilateral, frontal or occipital
- Non-throbbing
- Moderately severe
- Due to overuse of analgesics
- ? Transformation of migraine or TTH



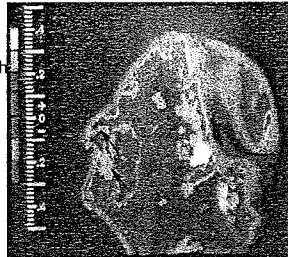
## CDH - Treatment

---

- Patient understanding
- Remove causative medication
- Avoid substitution
- Antidepressants
- Adjuvant therapy
- ? Sedating anti-histamine
- Treatment of withdrawal

## Trigeminal Neuralgia

- Paroxysmal pain – seconds to < 2 min
- Distributed along 5<sup>th</sup> cranial nerve
- Asymptomatic between attacks
- Trigger points



## Trigeminal Neuralgia - Treatment

- Carbamazepine
- Gabapentin
- Baclofen
- Phenytoin
- Valproate
- Chlorphenesin
- Adjuvant
  - TCAs
  - NSAIDs
  - Surgery for refractory cases

## Glossopharyngeal Neuralgia

- Similar to Trigeminal Neuralgia
- Unilateral pain
  - Pharynx
  - Soft palate
  - Base of tongue
  - Ear
  - Mastoid
- Treatment as for Trigeminal Neuralgia

## Atypical Facial Pain

- Diagnosis of exclusion
- ? Psychogenic facial pain
- Location and description inconsistent
- Women, 30 – 50 years old
- Usually accompanies psychiatric diagnosis
- Treat with antidepressants

## Post-Traumatic Neuralgia

- Neuroma formation
- Occipital and parietal scalp
- Diagnosis based on history
- Treatment
  - Trigeminal Neuralgia
  - Bupivacaine to trigger points
  - Occasionally amenable to surgery

## Post-Herpetic Neuralgia

- Persistent neuritic pain for > 2 months after acute eruption [anti-virals <48hrs]
- Treatment
  - Anticonvulsants
  - TCAs
  - Baclofen

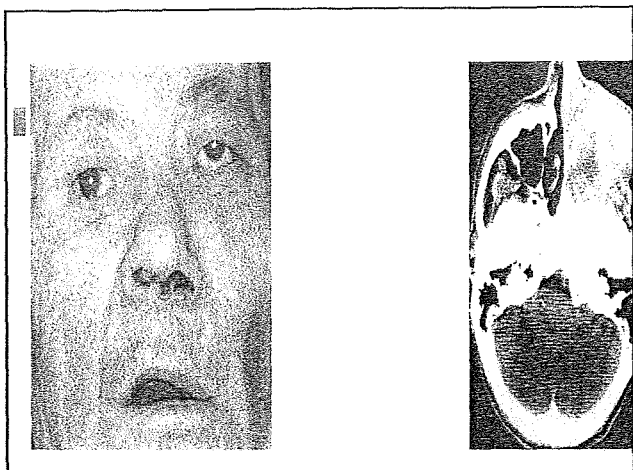
## Ca Nasopharynx

- Environmental epidemiology:
  - Viruses
    - EBV - well documented viral "fingerprints" in tumor cells and also anti-EBV serologies with WHO type II and III NPC
    - HPV - possible factor in WHO type I lesions
  - Nitrosamines - salted fish
  - Others - polycyclic hydrocarbons, chronic nasal infection, poor hygiene, poor ventilation
- Often subtle initial symptoms
  - unilateral HL (SOM)
  - painless, slowly enlarging neck mass
- Larger lesions
  - nasal obstruction
  - epistaxis
  - cranial nerve involvement

## Ca Nasopharynx

- Xerophthalmia - greater sup. petrosal n
- Facial pain - Trigeminal n.
- Diplopia - CN VI
- Ophthalmoplegia - CN III, IV, and VI
  - cavernous sinus or superior orbital fissure
- Horner's syndrome - cervical sympathetics
- CN's IX, X, XI, XII - extensive skull base





## Rx Ca Nasopharynx

- Mainly diagnostic - Biopsy
  - consider clinic bx if cooperative patient
  - must obtain large biopsy
  - clinically normal NP - OR on endoscopy
- Surgical treatment [primary lesion or regional failure with local control]
- External beam radiation [Dose: 6500-7000 cGy]
  - Primary, upper cervical nodes, pos. lower nodes

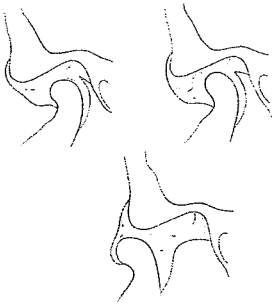
## Prognosis

- External beam radiation - complications
  - More severe when repeat treatments required
  - Include
    - xerostomia, tooth decay
    - ETD - early (SOM), later (patulous ET)
    - Endocrine disorders - hypopituitarism, hypothyroidism, hypothalamic dysfunction
    - Soft tissue fibrosis including trismus
    - Ophthalmologic problems
    - Skull base necrosis
- 40% overall survival at 5 years
- Complete H&P, careful otologic, neurologic, cervical and NP exams
- Three WHO types - all from NP epithelium
- Types II, III - better prognosis, EBV assoc.
- Treatment is primarily XRT

## Temporomandibular Disorders

- Symptoms
  - Temporal headache
  - Earache
  - Facial pain
  - Trismus
  - Joint noise
- 60% spontaneous

### Internal Derangements



- Tenderness to palpation
- Pain with movement
- Audible click

### Degenerative Joint Disease

- Pain with joint movement
- Crepitus over joint
- Flattened condyle
- Osteophyte formation

### Myofascial Pain

- Most common 60% - 70%
- Muscle pain dominates
- Tenderness to palpation of masticatory muscles

### TMD - Treatment

- NSAIDs
- Physical therapy
- Biofeedback
- Trigger point injection
- Benzodiazepines
- TCAs or SSRIs for chronic muscle pain

### Pseudotumor Cerebri

- Intermittent headache
- Variable intensity
- Normal exam except papilledema
- Normal imaging
- CSF pressures > 200 cm H<sub>2</sub>O

### Pseudotumor Cerebri - Associated History

- |                                    |                                    |
|------------------------------------|------------------------------------|
| ■ Mastoid or ear infection         | ■ Vision fluctuation               |
| ■ Menstrual irregularity           | ■ Unilateral or bilateral tinnitus |
| ■ Steroid exposure                 | ■ Constriction of visual fields    |
| ■ Retro-orbital or vertex headache | ■ Weight gain                      |

### Pseudotumor Cerebri – Treatment

- Reduce CSF production
  - Furosemide
  - Acetazolamide
- Weight loss
- Low salt diet
- CSF shunting
- Incision of optic nerve sheath

### Intracranial Tumor

- 30% have headache
- Dull or aching
- Crescendo over time
- Early morning
- Increased with valsalva
- Vomiting with nausea
- Neuro exam may be normal

## Subdural Hematoma

- History of trauma
- Fluctuating level of consciousness
- Pain lateralized
- Tenderness to percussion over hematoma
- Trauma may be remote in chronic SDH

## Subarachnoid Hemorrhage

- Sudden onset, severe, generalized pain
- Nausea and vomiting
- Stiff neck progressing to back pain
- LP if imaging negative

## Infectious

- |                    |                             |
|--------------------|-----------------------------|
| ■ Meningitis       | ■ Epidural abscess          |
| ■ Acute meningitis | ■ AIDS of CNS               |
| ■ Fever            | ■ Sarcoidosis               |
| ■ Stiff neck       | ■ Diagnosis dependent on LP |
| ■ Fungal           |                             |
| ■ Tuberculous      |                             |
| ■ Luetic           |                             |

## Hypertension

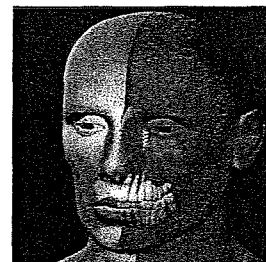
- Usually with diastolic pressures > 115 mm Hg
- Throbbing
- Nausea

## Low ICP Headache

- Usually from LP
- Worse with sitting or standing
- Vertex or occipital, pulling, steady
- Usually resolve spontaneously
- Blood patch for resistant cases

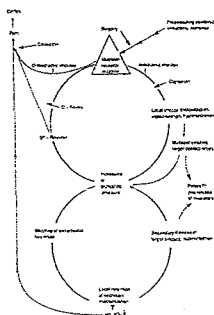
## Sinus Headache

- Acute sinusitis accepted
- Chronic sinusitis controversial
- Constant, dull, aching
- Worsened with jarring, stooping or leaning forward
- Referred pain possible



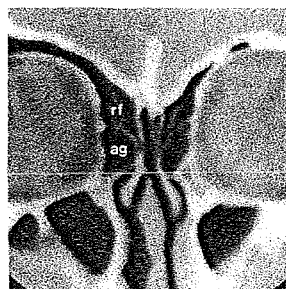
## Contact Point Theory

- Stammberger and Wolf 1988
- Role of Substance P
- Axonal reflex arc
- Predisposing anatomy



## Agger Nasi Cells

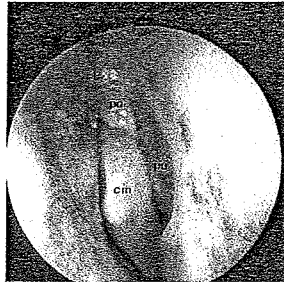
- Anterior and superior to insertion of middle turbinate
- Narrow frontal recess





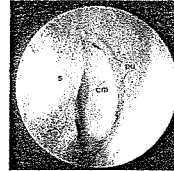
## Uncinate Variations

- Anterior displacement
- Pneumatization
- Narrowing in middle meatus or contact with middle turbinate



## Middle Turbinate Variations

- Paradoxically bent
- Concha bullosa
- Obstruction of middle meatus
- Mucosal contact with lateral nasal wall

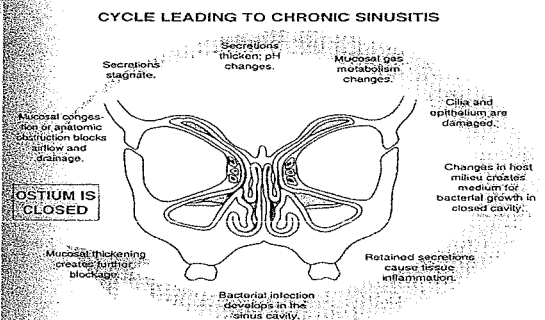


## Ethmoid Variations

- Extensive pneumatization
- Contact with middle turbinate
- Obliteration of middle meatus



## Pathogenesis chronic sinusitis

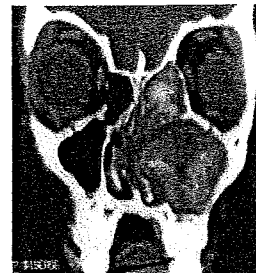


## Surgery for Sinus Headache

- Clerico 1995
  - 10 pts with prior diagnosis of headache syndrome
  - Mucosal contact points
  - 7 operated on with relief of HA
  - 3 responded to medical therapy for sinonasal findings
- Parsons and Batra 1998
  - 91% of 34 pts had decreased intensity of HA post op
  - 85% decreased frequency
  - All pts had indicators for surgery other than headache

## Allergic Fungal Sinusitis

- Allergic reaction to aerosolized fungi
- Treatment is surgical with perioperative oral steroid and post-operative topical steroids
- High recurrence rate, requires close follow up

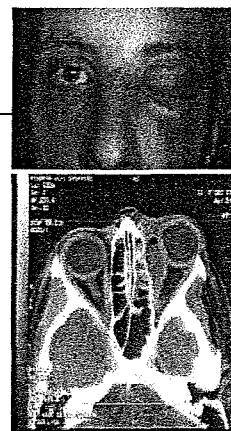


## Surgery for Sinus Headache

- Headache as **SOLE** indication for sinus surgery still **unproven**
- Headache should improve with decongestant and topical anesthesia if good results are to be expected post op

## Orbital cellulitis:

- Proptosis, Chemosis, Edema, Pain
  - Dilated pupil
  - Visual loss
  - Ophthalmoplegia
  - Afferent pupillary defect



## Conclusion

- Headache & facial pain are common complaints
- History most important in making accurate diagnosis
- Recognize psychological aspects of pain

## **FULL-FULL COPY DENTURES - A TECHNIQUE**

This is an article based completely on hands-on experience. If you have a not so elderly patient, preferably male and not on antidepressants, whose dentures he is fairly happy with but have worn and slackened with the passage of time, then this article is for you.

You will require Kerr thermoplastic impression compound, fondly known as compo, and light-bodied silicone such as President (Both available from Bart Ent).

Examine the fitted surface of the dentures. Measure the freeway space. The opportunity is there to improve upon the denture. The areas one usually needs to modify are;

1. Posterior border of palate. You will need to get a good post dam or post dam area.
2. Upper buccal flange
3. Additions to posterior occlusion
4. Extensions to lower buccal flange.
5. Additions to incisal edge.
6. Hollowing of labial flange.

I usually first Vaseline the patients lips. Gloves cannot be worn. You will need to use warm wet fingers. I also dry the palate with a gauze and mark the fovea palatini with a marker pen. I sometimes use a drop of mixed dycal on each fovea.

Fill a bowl with very hot water, about 51degrees Celsius, and light your burner. Compo is great material. It is very hard and stable and will not distort. It has an unusual smell when heated, and is used in some dental hospitals to make rims for the try in stage instead of wax as the material is so strong. You can add to it, and you can peel layers off it with a Stanley knife.

Identify the areas on the dentures you want to modify. Very commonly the post dam area, retromolar pads and hamular notches are the ones to look for. Soften the compo stick in the water till it just starts to melt, and then pass it over the flame, moulding a cone at the tip and then teasing it into the flame every few seconds till it is quite sticky. Mould the material around the denture periphery and build out the areas required by adding more and more layers of material incrementally.

On the lower one is looking for the S curve and a good buccal seal with clearly defined retromolar

pads.

On the upper you are excused for getting excited at the great squelch you will hear when the denture has been correctly extended to beyond post dam area, and the hamular notches. Pay attention also to the buccal seal. Mix the light-bodied silicone and load both dentures, plus the occlusal aspect of the lower denture. Place both dentures in the mouth and get the patient to close.

The fovea marks should come out in the impression. I will then mark the post dam line on the impression itself and the post-dam area I want the technician to score. This way the post dam is now under your control. Since you now have perfect impressions you should avail yourself of the opportunity of relining the old dentures and I usually get my technician to do so using same impressions.

With copy dentures you are retaining the features the patient is used to and also improving upon them. The shade, mould and occlusion are all there. If you need to change the vertical dimensions then an Alma gauge is used. This is a device which is used to measure and visualize tooth positions three-dimensionally. It records the incisal tip, using the position of the incisal papilla. It measures horizontal and vertical dimensions.

When the technician receives the impressions he will set about

1. Placing silicone putty into fitted surfaces.
2. Taking alginate impressions over the top.
3. When they have set dentures are removed.
4. Two holes are cut at the posterior tuberosities on each side.
5. Elastic bands are used to secure the two halves together.
6. Position so that the holes are facing upwards.
7. Pour in molten wax.
8. When cooled, separate the two halves.
9. Pour models into fitted surfaces, and create two models and articulate.
10. One at a time, remove the wax teeth and replace with acrylic teeth.

At the try-in stage, if all is well, take a wash impression inside the wax try-in. The technician will then pour the models and finish. Upon fitting the expression "sal-gerzuma" will come up, but be careful not to overtrim. The mylohyoid and genial tubercle areas made need reduction, but you should have an excellent set.

Dr. David Muscat

#### PRESIDENT'S REPORT: CURRENT ISSUES UPDATE

Besides organising highly successful CPE events, DAM has been handling a number of issues mostly related to clinic licence regulations.

- Sewage permit: dentists were verbally requested to apply for a sewage permit regulating effluent. No formal request for sewage permits has been forwarded yet. Our brief is that no permit is required for domestic effluent. Effluent from dental clinics is no different from domestic effluent provided that amalgam has been separated and fixer and developer are collected and disposed of separately.
- Licence fee: DAM commissioned a legal study. The result of the study as forwarded by Dr Spiteri Bailey has been issued in a previous PROBE edition. We've had no further developments.
- Infection control: Two years back the Public Health Department (PHD) issued an enforcement notice on the use and expensive testing of vacuum autoclaves in dental clinics. DAM provided members with updated GUIDELINES on infection control. DAM organised a series of consultation meetings with interested members as well as with the Public Health Department. **During talks with the Department, DAM held a firm stand based on the fact that our members are highly responsible, well informed professionals.** In response the PHD has issued a brief that they are now shifting their emphasis, in that clinics should be in a position to provide documentation that autoclave cycles used are tested, certified, logged, numbered and above all appropriate for the nature and size of loads processed. A manufacturer's certificate will be required to verify the nature (wrapped/

unwrapped, solid/narrow lumen instruments) of the load which can be processed by a particular cycle.

**B Class cycles: porous, wrapped and unwrapped load as per manufacturer certification.**

**S Class cycles: wrapped/unwrapped load as per manufacturer certification.**

**N Class cycles: unwrapped loads as per manufacturer certification.**

So basically all that is now being requested is that dental practitioners are in a position to validate the adequacy of their current infection control facilities in line with **informed, responsible professional practice.**

**Dr Martha Vella**

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#### AN UNUSUAL DOMICILARY VISIT

by Dr David Muscat

At her last visit Mrs. Grech implored me to visit her mother. It was rather urgent she said, as her mother was in pain. There was no question of her the coming over to the surgery, as she was too weak and never left the house. The Kappillan had also voiced his opinion that the dentist should visit her at home, as she was very frail. Well, I had a couple of hours after lunch on a Wednesday so off I went to Tona's house armed with my domiciliary case and my stainless steel instrument box from my student days.

Tona had one tooth left, I was told, and it shouldn't be too difficult to extract.

"Haga ta'hames minuti", I was informed.

As I parked my car in the side street of the sleepy village along came a stray dog and relieved itself on my front wheel. Rather charming I thought-or a taste of things to come.

I found the house easily enough, two doors from Grezzjus bakery. There were two barefoot children and a stray cat to greet me at the door.

“Wasal it-tabib”, they cried, and several people looked out of their windows.

I rang the bell by pulling a long chord and was ushered into a downstairs bedroom by a sombre woman dressed completely in black who professed to be Maria, another of the patients’ daughters. As I entered the dimly-lit room I was greeted by another relative Carmelina who escorted me to the bedside.

Tona was sitting upright, resplendent in her long white nightgown. Her hair was white and must have been over one metre in length. Her fingers and toes were bent almost at right angles-reminded me of a left-turn traffic sign.

Above her bed was an enormous picture of the Madonna with Child, perched precariously at about 45 degrees so that it towered over her. Above the head of the Madonna was a large gold crown, which was illuminated by small flickering light bulbs. I got Loretta to hold my torch, while I examined the tooth with a mirror.

Sure enough, to my horror and dismay, the tooth was a lower third molar-grossly carious and very firm. Explaining that I needed a radiograph and that this may end up as a surgical fell on deaf ears. Tona was crippled by arthritis, and besides; “Alla baghtek u ma tistax thalliha hekk”.

So, I gave the anaesthetic. I felt the gaze of the Madonna as well as the piercing green eyes of all the sisters. Every move of mine was being scrutinised. Yes. You guessed it! The tooth fractured during the extraction.

Loretta held the torch. Maria held the kidney dish below Tona’s chin and Carmelina knelt at the foot of the bed and started reciting the Rosary aloud. After half an hour of elevation and luxation, and a bit of elbow grease, Carmelina’s prayers paid off.

Tona’s blood had however splattered all over my trousers and shirt, but I had extracted the tooth and an enormous sense of relief swept the room. I was blessed several times and various Saints were mentioned. I suppose that for that hour I was a sort of hero.

I had to wait about another half an hour for haemostasis, and then felt obliged to have some Maltese tea with cloves, and qaghaq tal-ghasel in the kitchen afterwards with their dog snapping at my heels. The radio in the background played some melancholy music as the names of the people who died that day were announced.

I got fifteen liri for my troubles. “Kemmtiehu ghali” I was told.

I left the house with both a sense of fulfilment and a flea in my ear. When I got to my car I found a parking ticket on my windscreen- I was parked on a faint yellow line. Then it started to rain heavily and I got drenched. I got into my car and thundered off home.

-----  
The names of the characters have been changed but the story is real  
-----

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## **EU DESK UPDATE AUGUST 2006**

### **Commission launches consultation on EU framework for health services**

The Commission has today launched a public consultation on an EU framework for health services. The consultation, which will run until 31 January 2007, will seek the views of stakeholders – certainly including the dental profession – on how best to deal with cross-border health services, including patient mobility and healthcare professional mobility. The Commission's plans for the health sector will also cover ways of encouraging co-operation between different national health systems: sharing best practice and creating networks of centres of reference. The EU framework will be very much in focus in the debates at this year's European Health Forum Gastein, which takes place 4-7 October and which members of the CED Brussels office will attend.

### **Medical Devices Directive – ENVI committee votes on 4 October**

The European Parliament's ENVI Committee will adopt its report on the Commission's proposed revision of the Medical Devices Directives on 4 October. The rapporteur, Thomas Ulmer (EPP/DE), has included two amendments proposed by the CED in his draft report. These amendments propose a deletion of the introduction of validation procedures for software contained in medical devices, as well as of a complex post-market surveillance system for custom-made devices. However, the rapporteur has withdrawn an important amendment designed to avoid a patient being named on the declaration of conformity that accompanies a custom-made device..

### **Amalgam – CED advises COM on health risks of amalgam and alternatives**

The working group on amalgam has written to the Commission to give an overview of the health risks posed by amalgam and by

materials used as alternatives to amalgam, such as resin-based composites. The letter emphasises that the overwhelming body of scientific evidence does not support any link between amalgam and the diverse health claims made against amalgam: e.g. neurological disorders and "amalgam illness". In respect of alternative materials, the letter stresses that they have undergone much less research than amalgam, and that concerning risks have been identified, e.g. allergic reactions (it is estimated that approx. 2% of dentists suffer from contact dermatitis with respect to composites), and estrogenicity and cytotoxicity. However, the CED letter concludes that there is a place and requirement for a variety of materials in the dentist's armoury in order to meet the needs of patients, and this includes amalgam. The letter was written on the request of the Commission for more information on the potential health risks of amalgam and alternatives. Susie Sanderson and Klaas-Jan Bakker – also member of WG Amalgam – met the responsible Commission official on 13 September to present and explain the letter. The CED will remain closely in touch with the Commission, on the health aspect of the amalgam debate, but also on the environmental aspect. On 26-27 October, the Commission is hosting an international mercury conference in Brussels on "how to reduce mercury supply and demand". Whilst the issue of amalgam is not explicitly on the agenda, Commission officials have noted that it is very likely that the issue of amalgam will be discussed.

### **Future Events**

4-7 October  
European Health Forum Gastein, Austria

25 October  
High Level Committee on Health

26-27 October  
International mercury conference, Brussels

15 November  
CED General Meeting, Brussels

Dr. Audrey Camilleri, EU Liaison Officer

# DIFFLAM<sup>TM</sup>

## ORAL RINSE

### BENZYDAMINE HYDROCHLORIDE

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

**Proven in post-surgical patients (n = 13)**  
Assessed in a sample of periodontal post-surgical patients,  
Diffiam<sup>TM</sup> 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  
apthous ulcers,  
Diffiam<sup>TM</sup> Oral Rinse showed:

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

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



GINGIVAL INFLAMMATION



APHTHOUS ULCERS



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

- post-tonsillectomy
- in post-radiation mucositis\*
- in post-chemotherapy mucositis\*
- in gingival inflammation
- relieving pain associated with aphthous ulcers\*

**Diffiam<sup>TM</sup> Oral Rinse**

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

and the only oral rinse with analgesic,  
anti-inflammatory and local  
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Effective relief of pain  
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