Situations Vacant

Dental Hygienist
Full or Part Time
Qualified State-Registered Dental Hygienist to work in our SkyParks practice. Maltese-Speaking. Computer literate. Past experience, a pleasant personality and ability to work in a team considered an advantage.

We will inform you of other events through the Summer. Enjoy your break! The cover picture is St Ursula street watercolour by the artist Jacqueline Agius.

Best regards,

David

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

Dental Surgeon
Full Time. Registered, Maltese-speaking dentist to work in our Gozo practice. Experience, a commitment to CPD, a pleasant personality and ability to work in a team are important. Part-time applicants may be considered.

Dental Equipment for Quick Sale

• Descaler – Dentsply/Cavitron Model 3000
• Autoclave Steriliser Domina Vacuum
• Other instruments including forceps, mouth mirrors, hand instruments etc.
• Dental chair
• Dental overhead light
• X-ray machine and films
• Storage cabinets

For further information please call 79539309 / 21350256.

Dental Clinic Available in Gozo

• Fully licenced Dental Clinic
• Fully equipped Dental Clinic (OPG)
• Fully equipped Laboratory
• Separate room for cleaning & sterilizing of instruments
• Location in the centre of Victoria Gozo
• Easy access from the street to the clinic without steps, extra wide doors, which makes it easy to clients with pushchairs and wheelchairs
• This clinic meets all the EU standards and regulations requirements of today

For further information please call 79539309 / 21350256.

Editorial

By Dr David Muscat

Dear colleagues,

The Medical Council elections have been held. There were three candidates. Drs Anthony Charles and David Muscat have been elected for a period of three years. Dr Nicholas Bezzina came third.

An EGM has been held to discuss the issue of new Dental schools opening in Malta as well as the dental clinic inspections. Both issues are still being worked on. We are also currently in talks regarding the outsourcing of dental fillings to dentists in private practice.

An excellent DAM endodontics hands-on course and a lecture on local anaesthesia was held at the Hilton on 7 and 8 May, sponsored by the Hilton, Bart Enterprises, Cusm and 1A Pharma. The course was run by Dr. Vipul Kataria and Dr. Sameena Choudhry from Kings London.

The next DAM event is on 15 June at The Federation Hall, Gzira on at 8pm. ‘Law and Ethics 2’ by Dr Julienne Cassar Demajo sponsored by Kin.

Enjoy your break! The cover picture is St Ursula street watercolour by the artist Jacqueline Agius.

Best regards,

David

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

Advertisers are responsible for the claims they make in their ads and the opinion of the advertisers and editors of articles in the issue are not necessarily the opinion of the DAM.
Harnessing the proven power of sodium bicarbonate to help stop bleeding gums1-5

parodontax® toothpaste is unlike any other toothpaste. Its unique formulation contains 67% sodium bicarbonate. This gives parodontax® toothpaste a mode of action which helps disrupt the sticky polysaccharide matrix holding plaque to the teeth.1 The result – more plaque is removed with brushing.1,2,3

See the benefit after just 60 seconds4

After just 60 seconds of brushing with parodontax® toothpaste with 67% sodium bicarbonate, patients start to gain the benefit, with a 23% greater plaque reduction compared with a non-sodium bicarbonate toothpaste.1

parodontax® toothpaste reduces bleeding significantly more than a non-sodium bicarbonate toothpaste4,5

You know that when you see bleeding on probing, something needs to be done. Recommend parodontax® toothpaste as part of your advice to patients for their ongoing oral care routine to combat bleeding gums and help keep those gums healthy.1,5

parodontax® toothpaste even helps in areas hard to reach with a toothbrush4

When your patients brush their teeth, those hard-to-reach areas are where plaque builds up the most. So, it is comforting to know that parodontax® toothpaste shows the greatest advantage in plaque reduction in these hard-to-reach areas.1,4

After obtaining funds from the European Union through the Maltese national Agency, the Dental Association of Malta carried out its first Key Action 1 (KA1) activity in Rome, Italy. After a call from applications and a selection process, 8 members were chosen to travel to Rome for 9 days in February 2016. The candidates attended a comprehensive course on occlusion and temporo-mandibular Disorders. The course was given by Professors and Senior Lecturers from the Dental Department of La Sapienza University.

Whilst in Rome, the candidates were also invited to attend the annual congress of Aesthetic Dentistry hosted by the Italian Association of Conservative Dentistry (SIDOC).

Renown international speakers such as Ignazio Loe, Francesca Vailati, Luiz Narciso Baratieri and Lorenzo Vanini gave excellent presentations on various topics from Aesthetics to tooth wear.

During their stay, a social program was also organised whereby the members were taken on guided tours of Rome, Vatican City and Tivoli. From the Dental Association, Dr. Noel Manche and myself accompanied the candidates and I must say it was a pleasurable and rewarding experience all around.

Everybody participated actively and conducted themselves in the highest professional manner. Thank you all for your participation and good company!

In the next editions of the probe, we will be publishing reports from the candidates who attended the course as a means to disseminate the knowledge learnt during these fantastic 9 days of cutting edge dentistry.

More photos on page 6
FROM MALTA TO ITALY
A BRIDGE TOWARDS ENHANCING QUALITY DENTISTRY

Full report and photo on page 5.
Accurate assessment of the periodontal and peri-implant tissues is an essential component of ethical patient care. The Basic Periodontal Examination (BPE) is an efficient screening tool that can be used to highlight the extent of periodontal examination needed and provides simple, straightforward guidance on treatment that is required (1).

The BPE was first developed by the British Society of Periodontology in 1986 (2). There have been minor adjustments made over the years and the most recent version, which will be outlined in this article, was published in March 2016. In recent times, dento-legal claims regarding inappropriate periodontal and implant care have increased exponentially and are now the most common reasons for litigation in dentistry. Therefore, screening patients should be a regular component of every new patient appointment (3). The BPE should be considered together with other factors such as patient susceptibility and individual risk factors.

**HOW TO MEASURE AND RECORD THE BPE FOR THE DENTAL CLINICIAN**

The periodontal probe is the most important clinical tool for obtaining information about the health status of the periodontal tissues. Probing is the act of walking the tip of the probe along the junctional epithelium within the sulcus or pocket for the purpose of determining the presence of past disease activity (4). Good probing technique is essential to achieve accuracy in your measurements as diagnosis, treatment procedures and clinical outcome will be based on these recordings. The accuracy of measurements obtained by probing can vary significantly depending on the clinician’s skill, size and design of the probe, probing technique and tissue health (5).

- The dentition is divided into six sextants, consisting of molar and premolar, and canine and incisor, as shown in Figure 1.

All teeth in each sextant are examined except 3rd molars. For a sextant to qualify for recording, it must contain at least two teeth. If only one tooth is present in a sextant, the score for that tooth is included in the recording for the adjoining sextant.

**A World Health Organisation (WHO) CPITN-E probe is used and is specifically designed to facilitate the BPE**. The probe (Figure 2) has two distinctive features: the “ball end”, 0.5 mm in diameter; and a black band, from 3.5 mm to 5.5 mm. The ball end is used to detect calculus and permit accurate tactile feedback to the clinician of the extent and location of sub-gingival deposits. The black band is a clear indicator of the extent of the pocket probing depth and is a fast way to screen patients and determine if pockets are shallow (<3.5 mm), moderate (3.5 mm-5.5 mm) or deep (>6 mm). The probe should be held in a relaxed, modified pen grasp and a light probing force is recommended at 20-25 grams.

- The probe should be inserted into the gingival crevice of each tooth in every sextant and “walked” along the junctional epithelium (Figure 3) using a methodical approach to ensure that no sites are omitted from the examination. The clinician should insert the probe into six sites on each tooth (distobuccal, buccal, mesiobuccal and, likewise, on lingual/palatal surfaces). The highest score for each sextant should be recorded (6). Keep the end of the probe in contact with the tooth surface and parallel to the long axis.

Maintain contact with the tooth while passing the probe in an apical direction until the resilient stop of the soft tissue attachment is felt. This may easily be distinguished from the sudden hard stop of subgingival calculus or a ledge on a restoration. When measuring interdentally, an oblique angle of the probe as to be applied in order to reach the mid-line of the interdental area where the tissue loss is usually greatest. This will slightly overestimate the pocket depth.

**Upper (17–14)**

- Upper right (17–14): Upper anterior (13–23)
- Lower right (47–44): Lower anterior (33–33)

**Upper left (27–27)**

- Upper left (27–27): Lower left (34–37)

---

**Figure 1:** Box chart

**Figure 2:** WHO probe

**Figure 3:** Walking probe

**NEW**: now available in blue and pink
The Dental Probe June 2016 – Issue 58

THE LATEST GUIDELINES

About the Author
A graduate of Trinity College Dublin, Claire has 22 years clinical, research and academic experience teaching undergraduate and post-graduate Periodontology at Kings College London and at New York University. She has a Masters Degree in Higher Education and is a fellow of the Higher Education Academy. Claire recently received the Visviree-Wahl KCL Studentship Award to complete a PhD in risk communication as a means for patient behaviour change in primary dental settings. Claire specialises in the delivery of hands-on masterclasses in Periodontal and implant maintenance and advanced non-surgical instrumentation techniques for individuals and small groups. For Free online CPD, articles, instrument guides and more to learn about screening patients for periodontal disease go to clairemccarthy.co

REFERENCES

INTERPRETING BPE CODES AND establishing the treatment need
In order to establish what is required once the patient has been allocated a BPE code for their periodontal condition, general guidance on treatment for each score is provided to assist in the treatment planning process and to know when a specialist referral may be required (Table 2).

RADIOPHAGS
Radiographs to assess alveolar bone levels should be obtained for teeth or sextants where BPE codes 3 or 4 are detected (7).

Periapical images are considered the gold standard for periodontal assessment as the crestal bone levels should be visible.

CONCLUSION
All clinicians should regularly screen patients to detect and record the presence of periodontal disease (2).

A BPE is simple, quick and should be part of every new patient assessment and recall appointment as record keeping is the most essential part of managing periodontal disease (2).

It takes a matter of minutes to complete and will elevate the quality of care for each and every patient.

Figure 4: Sample BPE chart

<table>
<thead>
<tr>
<th>CODE</th>
<th>CLINICAL FINDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No pockets &gt;3.5mm, no calculus or overhangs, no bleeding on probing. Black band completely visible</td>
</tr>
<tr>
<td>1</td>
<td>No pockets &gt;3.5mm, no calculus or overhangs, bleeding on probing. Black band completely visible</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TREATMENT NEEDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
</tbody>
</table>

Table 1: Clinical finding

Table 2: Treatment need

Table 3: When to refer patients - guidelines for clinicians based on BPE codes

Advanced Non-Surgical Periodontal Therapy and Implant Maintenance Skills for Maltese Dental Hygienists

Earlier this year, The Directorate Allied Health Care Services (DAHCS), Ministry for Health organised and sponsored an advanced training course for Dental Hygienists in the Maltese dental sector. This significant event had the cooperation and logistical support from the Department of Dental Surgery and the Faculty of Dental Surgery. Visiting Professor at NYU and former head of BDS undergraduate Periodontology at Kings College London, and current Doctorate researcher Claire McCarthy delivered this 4-Day programme.

The objective of this intensive course was to further the education of the dental hygienists in the diagnosis and treatment of periodontal disease; the non-surgical use of periodontal instruments, patient education, behaviour modification and disease prevention. As a result of this professional development the Dental Hygiene profession in Maltese Marine Gozo. We were also joined on one of the sessions by local periodontist Elizabeth Martinelli, who also teaches at the faculty of dental surgery.

This 4-day programme consisted of theoretical presentations, small group work, live demonstrations, phantom head work and daily assessments. Each learning activity had clear learning outcomes to qualify for verifiable CTD hours.

Couse participants received didactic teaching methods and hands-on practical exercises throughout the entire programme. Emphasis was placed upon effective and efficient non-surgical instrumentation and debridement of root surfaces, as well as educating participants on self-care and the role of plaque in the progression of periodontal disease and peri-implant mucositis and peri-implantitis.

A combined approach to root surface debridement is considered the gold standard and use of well designed, ergonomic and efficient hand and powered instruments are an essential part of every clinicians toolkit. Feedback from course participants was extremely positive and overall deemed a worthwhile, empowering and educational experience for all.
An Apex Locator is important to use in RCT. The canal has to be damp. The largest file that binds snugly at the red bar O ready is the point at which the pulp becomes PDL.

- A 30 degree curvature is moderate.
- A 27 gauge needle in terms of file size is 40-42.

One needs a size of 25-30 –the irrigant with light pressure only goes 1-2 mm apical to where the needle is placed.

Hand instruments should be used with
- Wide canals
- open apices
- complex curvatures
- attempting to bypass fractured instruments and ledges.
- removing gut.

The technique is based on the canal. Tactile feel in endodontics. When a canal disappears on a radiograph, that is where it divides.

BIOLICAL OBJECTIVES
a. Confine instruments to roots
b. No infected debris beyond foramen
c. Remove all tissue from root canal space
d. Eliminate bacteria and toxins
e. Creation of sufficient space for intra-canal medicament.

The inflammatory response will get rid of the parts you left eg. in lateral canals. A crown down approach allows time for irrigation and this is very important. Bend endo needle 1mm short. Use an endo activator.

Get corresponding gp point or next size-up and down –turbulent flow. Use 17 per cent EDTA liquid and leave 1 minute per canal. Remove the smear layer. Final wash with hypochlorite. If you use chlorhexidine with sodium hypochlorite you will get a precipitate which will block tubules.

If you mix chlorhexidine with EDTA you get a precipitate. Always replenish the hypochlorite as it lasts only one minute. Use finger pressure only so you can see the syringe moving.

You want a turbulent flow of irrigant. Keep it up and down and keep moving. Use a size 25 and then step back to size 40.

Use an up and down motion with size 6,8,10 otherwise you may get apical transportation. Rotations and balanced forces.

PRINCIPLES OF ACCESS CAVITIES
a. direct line access
b. remove roof of pulp chamber
c. avoid damaging the pulp chamber
d. preserve tooth tissue
e. retention and resistance form for temporary and permanent restoration.

Go apical to 25-30 and each successive layer file is placed 0.5-1m less into canal to produce a taper. Recapitulate between each step.

DISADVANTAGES
a. possible extrusion
b. curved canals likely to straighten
c. apical area may get blocked with debris
d. first files to apical region.

Stainless steel files are all 02 taper. Apical gauging if file goes through curve bigger than a 25 at the end. Then go to 35,40 till the first one stays.

ANTI CURVATURE FILING
Filing away from the inner curve of the root to reduce the risk of a perforation. The MB roots of an upper molar and the Mesial roots of the lower molar are most at risk. Use in cases with moderate to severe curvature. File furcal walls once but the M,D,L and B walls are filed 3 times. We prepare slightly shy of the final part of the curvature. Use tactile feedback to find curvature. An X gates is gates gliddens all in one.

Continues on page 14.
PREPARATION OF THE ROOT CANAL SYSTEM USING CONTEMPORARY NITI INSTRUMENTATION

Continues from page 12.

THE BALANCE FORCE TECHNIQUE
Initially designed to be used with flex R files – k files with a modified tip. Rotate quarter turn till you engage the dentinal wall. Rotate approx three quarters antclockwise whilst maintaining apical pressure to grip the dentine - a click may be heard.

Check and clean file. Repeat and you will see file going progressively further. Use sequentially larger files.

THE STEP DOWN TECHNIQUE
1. Access – keep using irrigant. Create glide path up to size 35 file to just before curvature or 4mm from EWL.
2. Open up the coronal portion before the curvature starts. Get a glide path to 25-40. Maintain patency to the curve. Work up sequence. Other alternatives-hand instruments produce more debris. Then use a gates glidden2 to the point before the curve. Peck it down. Clear the path for gates gliddens 4,3,2,..then patency file and recapitulate same time. Lean on it on outer wall and brush out-aim is to remove triangle of dentine. A gates glidden 4 is enough so that the drill disappears into the orifice and no more than that.

Continues on page 16.

An opportunity has arisen to run a dental clinic in a medical centre, with a very good client base, located centrally in the south of Malta.

Applicants must have a degree in dentistry, be knowledgeable about the operations of a dental clinic, have excellent communication and managerial skills, have a motivational approach, and an ability to collaborate within a multidisciplinary healthcare team. Experience is highly considered, yet it is not a requisite.

Interested individuals may send an updated C.V. together with a passport photo and covering letter to camilleri.j255@gmail.com by not later than Monday 18th July 2016.

All applications will be treated in the strictest confidence.
PREPARATION OF THE ROOT CANAL SYSTEM USING CONTEMPORARY NITI INSTRUMENTATION

Continues from page 14.

Keep clear—if you force a hand file you will get a ledge. The outer wall relocated so we have direct line access to curvature.

Establish zero using EAL. Verify glide path with a size 10 file. Push/pull motion until size 10 file is loose. Use plenty of irrigant. Whatever you do the size 10 file has to be loose in a push/pull motion.

Balance force-file down to working length. Between each file you maintain patency. Mix the exhausted irrigant with new irrigant. Recapitulate.min size 25-30. If you use a size 27 gauge needle no hope to get to 1mm short apices. The sizes 55, 60, 70 are used in the straight part of the canal.

Prepare to working length 0.5mm short of the zero reading. Look at silicone on your file when you do the quarter turn. Step back to size 70 file either 0.5mm or 1mm. Patency with size 3 between every file. The taper of the canal is wider than the taper of files.

APICAL GAUGE
With each file remember
• Patency
• Irrigate
• Recapitulate

With the Sx lean on the outer canal and remove the triangle of dentine. Protaper Next – brush on outer stroke. Swaggering. keeps cross sectional shape small but the envelope of the cut is large.

The Protaper philosophy:
• X1 TIP 0.17
• X2 TIP 0.25
• X3 TIP 0.3
• X4 TIP 0.4
• X5 TIP 0.5

There is a wider mill to the diameter of the file—brush with it. EDTA 17% used—X1 programmed to 300 rpm. Use gp pumping, endo activator, ultrasound. Then hypochlorite and activate it.

With Protaper Next – fill chamber with irrigant. With this system you can take it beyond the curve. Take X1 down. Brush outer wall. Coronal flaring using X1 and X2.

Alternatively—use CG drills. Ss orifice opening etc. Irrigate—move needle, c reate turbulent flow of irrigant. Obtain reading with EAL. Verify the glide path. Keep size 10 nice and loose. Glide path to 0.5mm short of zero reading. Then X1 and X2.

IMPORTANT
Once you hit the apex with X1 say goodbye and don’t use again. Patency fill/recapitulate frequently: 17% EDTA_final 2% NAOCl.

SEQUENCE
1. glide path: 10/5 or 10 and proglide
2. X1 yellow just past curvature—brush outenstroke and irrigate
3. Working length—apex locator—depends on size of canal
4. X1 to working length then X2 to working length. Check with

size 25—does it go down
5. X3

WAVE ONE GOLD
50% MORE resistant to cyclic fatigue than Waveone. Covers wider range of canal morphologies. Shortens shaping time. It has reciprocating motion; evolving cross section; gold thermal treatment; optimized tip and variable taper.

1. Access cavity
2. Coronal flaring-primary drill
3. Zero reading
4. Apical prep: 0.5mm short

Establish straight line radicular access. Estimate working length. Size to file loose to where you want drill to go. Fresh irrigant each time. You need to have a ferrule of 2-3 mm and one can use a Nymar core in amalgam.

The floor of the pulp chamber is level with the CJD. Leave 17% EDTA irrigant to soak through calcification. K files rhomboid in cross section. C plus file cutting tip. Access—coronal flare—just to curvature. 0.3mm short of zero reading. Maintain patency past zero reading.

PROGLIDER FILES
Expensive. Will be 16 at tip. When you work to X2 kiss the apex and say goodbye. 0.3 mm apical terminal from radiographic apex, and frequently on the side. Rely on apses locator—gold standard. The radiograph is a back up if apex loose.

DETECTION OF FRACTURE
An isolated pocket. Place some la on side of root and reflect ticket margin. May see vertical crack.
INFECTION PREVENTION: WHAT’S NEW?

By Christian Stempf, Hygiene Adviser
Member of CEN/TC102 wg5 + wg8 European Committee for Normalization

Bacteria
- There are around 7300 known species with a wide range of shapes:
  - Bacteria grow to a fixed size and replicate through a form of asexual reproduction.
  - Two identical clone daughter cells are produced, each with the same DNA.

Bacterial multiplication
- Bacteria sporulate under unfavourable conditions.
- Spores are resistant to heat (116°C), radiation, chemicals, and desiccation.
- Under favourable conditions, spores are capable of germinating into a new organism.
- Spores in the tombs of the Pharaohs were able to germinate / grow when placed in appropriate medium.

Bacterial Endospores
- Under favourable conditions, bacteria sporulate.
- Spores are resistant to heat (116°C), radiation, chemicals, and desiccation.
- Under unfavourable conditions, spores are capable of germinating into a new organism.
- Spores in the tombs of the Pharaohs were able to germinate / grow when placed in appropriate medium.

Viruses
- The are no “good” ones...
- Generally viruses are much smaller than bacteria: 0.02 to 0.3 µm.
- Viruses are small infectious agents that can replicate only inside living cells.

Constantly increasing risk
- Increasing population and international contacts generate more traveling.
- Increasing population and international contacts generate more traveling.

More travelling → increased risk
- SARS Coronavirus (February - March 2003)
- Within months after its emergence in Guangdong China, it had affected:
  - more than 8000 patients,
  - 774 died,
  - in 26 countries on 5 continents.

The Severe Acute Respiratory Syndrome

Sterilization & Hygiene
INFECTION PREVENTION: WHAT'S NEW?

Continues from page 19.

Leading causes of death

<table>
<thead>
<tr>
<th>Year</th>
<th>Cardiovascular diseases</th>
<th>Infectious diseases</th>
<th>Cancer</th>
<th>Injuries</th>
<th>Respiratory and digestive</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>31%</td>
<td>22%</td>
<td>15%</td>
<td>9%</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>2005</td>
<td>30%</td>
<td>27%</td>
<td>13%</td>
<td>9%</td>
<td>11%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Leading causes of death

Each year 56 000 000 people die worldwide.

- HIV / AIDS: 1 600 000
- Tuberculosis: 2 000 000
- Hepatitis B: 350 000
- Hepatitis C: 170 000

HIV / AIDS

- Human Immunodeficiency Virus
- Causing Acquired Immune Deficiency Syndrome
- HIV progresses to AIDS within 10 years
- Allows life-threatening infections / cancers to thrive
- HIV is transmitted by the transfer of blood, semen, body fluids or breast milk
- Transmission modes: unsafe sex, blood transfusion, contaminated needles and perinatal

AIDS

- Signs and symptoms
  - Respiratory infections (bronchitis, pharyngitis, pneumonia)
  - Prostatitis, skin rashes
- Resistance is lost which leads to oral candidiasis and tuberculosis
- Worsening of latent herpes viruses may cause recurrences of herpes simplex, Epstein-Barr virus or Kaposi’s sarcoma (tumor)

What is Hepatitis?

- A, B, C, D, E
- Transmission modes: unsafe sex, blood transfusion, contaminated needles and perinatal
- Incubation period: from 30 to 180 days
- HIV may be detected 30 to 60 days after infection
- HIV is 50 to 100 times more infectious than HIV
- Unlike HIV, HIV can survive outside the body for at least 7 days

Hepatitis C

- Fact sheet
  - Called the “silent” epidemic
  - Most people are not aware of being infected for as long as 10 to 20 years
  - About 3.4 million people are infected each year
  - Some 150 million people are chronically infected
  - More than 350 000 people die from HCV each year
  - HCV infection is curable using increasingly effective antivirals
  - Despite ongoing research, there is no vaccine to prevent HCV infection

Hepatitis B

- Can be detected 30 to 60 days after infection
- Some 150 million people are chronically infected
- Incubation period: from 30 to 180 days
- Unlike HIV, HBV can survive outside the body for at least 7 days
- HBV infection is curable using increasingly effective antivirals
- Despite ongoing research, there is no vaccine to prevent HBV infection

Hepatitis A

- Chronic hepatitis A is rare
- It is rarely fatal
- It can be prevented by vaccination

Hepatitis D

- Can only be transmitted when an infected person with hepatitis B is also infected
- There is no vaccine

Hepatitis E

- Caused by the hepatitis E virus
- It is usually self-limiting
- There is no vaccine

What is Tuberculosis?

- TB typically attacks the lungs but can also affect other parts of the body
- TB is spread through the air by inhaling few germs
- TB typically attacks the lungs but can also affect other parts of the body
- TB can be treated with a standard 6 months course of four antimicrobial drugs
- TB can be treated with a standard 6 months course of four antimicrobial drugs

Who is infectious?

- The patient
- The dental technician
- The secretary
- The dental assistant
- The dentist

Potential targets?

- The dental
- The dental assistant
- The secretary
- The dental technician
- The patient
- Their respective families

HCAI - Nosocomial infections

- Fact sheet
  - 310 000 people will contract HCAI (9/100 in developing countries)
  - More than 1 300 000 people die each year
  - >30% of patients in ICUs get infected
  - Prolonged hospital stays: 16 million extra days in EU
  - Significance:
    - Infected patients may die or suffer long-term disabilities
    - One infected patient may infect 5 other patients
    - 400 000 people die each year
    - Massive costs estimated at €7 billion

Continues on page 22.
Risk in dentistry
Transmission modes
- Aerosols and splatter coming from the patient’s mouth and nebulized water from the dental unit
- Direct contact with blood droplets, saliva or any body fluid
- Indirect contact via contaminated instruments, turbines or handpieces
- Hands and staff
  - 75% of infections are transmitted by hands

Risk in dentistry
Dental unit water line
- Backflow
- Biofilm
- Stagnant water
- Quality of tap water

Factors which increase the risk of infection
- Succession of numerous patients
- Understaffing
- Lack of knowledge on hygiene procedures
- Inappropriate equipment
- Lack of training on the equipment

Risk in dentistry
Transmission of pathogens
- Blood born diseases
  - Hepatitis B-virus
  - Hepatitis C-virus
  - Hepatitis D-virus
  - HIV
  - EBOV (Ebola-virus)

Risk in dentistry
Transmission of pathogens
- Hands
  - Smear infections (faecal - oral)
  - Staphylococcus aureus
  - Streptococci spec
  - Herpes Simplex Virus (HSV)

Microbial aerosol concentration in general dental practices
- TYC agar plates: 8,000
- Columbia agar plates (Casella slit sampler): 6,000
- 4,000
- 2,000
- 1,000

Hand Hygiene
- Change gloves between patients / procedures
- Disinfect hands when changing gloves
- Clean only if visible dirt or blood
- Hand washing followed by friction should be avoided
- Latex and nitrile gloves offer comparable barrier performance
- Vinyl gloves are more porous compared to latex or nitrile
- Wear a surgical mask EN14683 (BFE>98%)
WEAR IS THE PROBLEM
ASSESSMENT, DIAGNOSIS, PREVENTION, MONITORING, INTERVENTIONS, FOLLOW-UP

Professor Brian Millar
Director of Fixed & Removable Prosthodontic Graduate Programme. Consultant in Restorative Dentistry King’s College London Dental Institute at Guys, King’s College and St Thomas’s Hospitals. Private Specialist Practice, London

Managing Tooth Wear
Reason for seeking help:
Aesthetics
Tooth Sensitivity
Function and Occlusal problems

Aetiology – tooth wear
• Attrition
• Abrasion
• Erosion
• Malformation
• Fractures
Always apply a prevention strategy

Erosion
• Enamel rounding, matt, smooth, cervical concavities
• Non-interdigitating
• Differential wear
• Sensitivity
• Acid damage
  – Dietary
  – Gastric

Attrition and erosion

Continues on page 28.
DO YOU HAVE THE RIGHT COVER UNDER YOUR PROFESSIONAL INDEMNITY POLICY?

Did you ever stop and think whether you are adequately covered by your Professional Indemnity policy?

European jurisdiction: have you extended your policy to include European jurisdiction cover especially if your clients include European nationals?

Do you perform Botox and/or dermal fillers? Have you informed your Professional Indemnity insurance provider? The MIB Dentists’ Insurance Scheme does in fact provide specific cover for you for such practices.

Did you know that Retroactive Cover ensures that you have continuous cover for claims which you are currently unaware of that might arise from your services in the previous years?

Is your Limit of Indemnity adequate? Have you chosen the correct Limit of Indemnity, does it reflect your true exposure?

The MIB Dentists’ Insurance Scheme offers various limits starting from €50,000 up to €500,000.

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

MIB is Malta’s largest insurance broker and risk management services firm, the local pioneer in this section with over 30 years of proven track record serving some of Malta’s major public and private corporate entities. MIB is the independent broking arm of MIB Insurance Group.

In an increasingly litigious environment, medical decisions and actions may be challenged and disputed. Are you protected?

For further information please contact: Tonio Borg
E. +356 234 33 142 M. +356 794 53 647 E. tonio_borg@mib.com.mt

Mediterranean Insurance Brokers (Malta) Ltd. is an enrolled company regulated by the Malta Financial Services Authority.

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WEAR IS THE PROBLEM
ASSESSMENT, DIAGNOSIS, PREVENTION, MONITORING, INTERVENTIONS, FOLLOW-UP

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Sensitivity

- This is not a problem in most patients with excessive tooth wear, as the teeth react to the exposed dentine and become less sensitive.
- Management:
  - Desensitising agents, toothpaste, ACP (Tooth Mousse, GC), chewing gum
  - Resin sealants, GIC, Biodontine

When to intervene

If the rate of wear is such that it is a source of concern or may affect the survival of the teeth

Attrition

- Flat teeth
- Interdigitate
- Physiological
- Rarely sensitivity
- Bruxism

Normal wear

- Related to age and diet
- Could assume 20-100 μm per year which is 0.2-1 mm per decade
- Occlusal enamel is 2mm thick

Digital Smile Design (DSD)

Please note that digital design and mock-ups cannot guarantee the same as the final result

Continues on page 30.
WEAR IS THE PROBLEM
ASSESSMENT, DIAGNOSIS, PREVENTION, MONITORING, INTERVENTIONS, FOLLOW-UP

Management of tooth wear
- See it – look for it
- Diagnose – identify cause
- Monitor – photograph, models, measure
- Prevent – eliminate/reduce further wear
- Intervene – only if necessary
- Replace – what is missing

Make a Diagnosis
- Identify the cause
- Establishing the aetiology will help formulate appropriate prevention strategies

MI restorations
- Loss of OVD
  - If no change to ICP – use ICP
  - If ICP unusable – use CR
- Replace what is missing
- Occlusal adaptation (“Dahl”)
- Maintain and repair

Beware: Alveolar compensation
- Wear with no loss of OVD but lack of space, i.e. alveolar compensation
- Crown lengthen?
- Does Dahl work?
- Difficult aesthetics, complex treatments

GC Gradia

Occlusal gold onlay

Continues from page 29.

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Planmeca University Partnership Concept

Planmeca is proud to introduce an innovative training concept for dentists. We invite leading universities and clinics to join the global Planmeca Digital Academy network and benefit from our cutting-edge technology.

Planmeca Digital Academy brings together your university’s expertise and skilled faculty staff with the latest dental equipment and software solutions. This cooperation model offers advanced dental training and continuous learning for today’s dental professionals.

- Possibility to take your dental training business to the next level with a trusted partner
- Dental training offered at the university’s facilities, using Planmeca’s state-of-the-art digital equipment
- Training planned with the help of Planmeca and carried out by the university’s own professionals and specialist partners
- The most modern methodologies ranging from 3D imaging and CAD/CAM to dental units and software solutions
- Attractive equipment and software packages offered for participating university partners

Contact us on kevin.galea@suratek.com.mt and tel: 27131624
WEAR IS THE PROBLEM
ASSESSMENT, DIAGNOSIS, PREVENTION, MONITORING, INTERVENTIONS, FOLLOW-UP

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CAREER OPPORTUNITY
QUALIFIED DENTIST

Need a qualified dentist to run a modern dental clinic in the heart of Qormi. The clinic consists of 110 square metres with the possibility of three chairs, an OPT room, a sterilising room plus a waiting area.

For more info please contact Mr Aldo Falzon on 9942 9309

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PAYMENT FORM

Please cut out this section and send with a cheque for 50 euro payable to Dental Association of Malta for your 2016 DAM membership - the best 50 euro investment ever!

TO:
The Treasurer, Dr Noel Manche,
The Dental Association Of Malta,
Federation Of Professional Associations,
Sliema Road,
Gzira.

NAME: ________________________________
ADDRESS: ________________________________

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WEAR IS THE PROBLEM
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Establish incisal edge position

Composite mock-up
Diagnostic wax-up
Squash on acrylic trial
Provisional restorations

Initial composite mock-up

- Dry teeth
- Add composite NO ETCH / BOND
- 5 x 5 area with LED light
- Evaluate with patient
- Index it
- Remove it

The effect of ageing and counteracting it: 1mm for 10-15 years
ONE MATERIAL – FOUR INDICATIONS

- All in just one product:
  - restoration, luting, cavity lining, core build-up
  - simply choose plunger and insert
- Pink colour – ideal for paediatric dentistry, core build-up as well as cervical restorations
- No need for conditioning or glazing

*Find all current offers on www.voco.com or contact your local VOCO dental consultant.