

The Maltese Dental Journal Dental Problem



The latex-free lip and cheek retractor

The gentle solution for a better view



- Efficient treatment and easier relative isolation
- Enlarged operating field and easy access to cavity
- Increased comfort for patients
- Attractive colours for enhanced patient compliance among children





By Dr David Muscat

Dear colleagues,

It has been a scorching Summer and I hope you have all had a nice break. This issue features three presentations which are of interest to all of us, namely digital dentistry, back and neck pain and how we deal with our patients.

The cover photo is of Dwejra in Gozo by Dr Josef Awad. Dwejra, otherwise known as Inland Sea is a lagoon formed through a geological fault in limestone resulting in a collapsed sea cave. It was one of the top ten dives described by Jacques Cousteau.

The 60 metre long cave leads onto the open sea. One can find a blend of flora, fauna, geology history and archaeology. An excellent place for photography, relaxing and snorkeling.

Best regards,

David Dr David Mi

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



CED Focus on Health Inequalities – Oral Health for All

All Europeans, regardless of their socio-economic status, are entitled to proper healthcare. This includes oral health which cannot be neglected as it is connected to essentially every aspect of our lives. Problems with oral health can affect our ability to taste, chew and eat, as well as to smile and speak, and impact on everything from our general health to our capacity to communicate and function in our personal and professional roles.

Policymakers, health professionals, academics and representatives of healthcare organisations had a chance to discuss this at the CED event "Health Inequalities – Oral Health for All" at the European Parliament on 19 June 2017, hosted by MEP Nessa Childers. Dental expenditures in the EU amounted to an incredible 92 billion Euros in 2015. In comparison with other diseases, dental diseases end up on a striking third place in the cost ranking of diseases in terms of private and public expenditure, only surpassed by cardiovascular diseases and diabetes.

MEP Nessa Childers, Member of the European Parliament's Committee on Environment, Public Health and

Saint Apollonia – Patroness of Dentists

Saint Apollonia is one of the patron Saints of Catania. This picture entitled 'Saint Apollonia Virgin and Martyr ' can be found in the Basilica Collegiata di Catania. The prayer to St Apollonia, virgin and martyr, asks for intercession and liberation from the severe pain of toothache and pain in gums, and her help in helping us patiently bear the pain.

The prayer asks for her, as she had withstood painful tooth torture, to help

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.

www.ivoclarvivadent.com Ivoclar Vivadent AG Bendererstr. 2 | 9494 Schaan | Liechtenstein | Tel.: +423 235 35 35 | Fax: +423 235 33 60 **DENTAL ASSOCIATION OF MALTA**

The Professional Centre, Sliema Road, Gzira Tel: 21 312888 Fax: 21 343002 Email: info@dam.com.mt



Food Safety, stated that "access to oral healthcare services is a significant issue among vulnerable and low income groups, especially when it comes to prevention; very often, individuals from vulnerable groups only access oral healthcare due to emergencies."

It is imperative that the most vulnerable populations receive adequate support in accessing care. The participants heard about great initiatives in the Netherlands and in Spain that provide vulnerable populations, including homeless persons, children from disadvantaged backgrounds and migrants with proper oral care. CED President Marco Landi concluded that "it is evident that oral health inequalities is a very complex topic that needs to be tackled by a multifacetted approach and by a variety of stakeholders together." The CED hopes that all stakeholders will work together ever more closely in the future to tackle these inequalities and help provide the best care for all.

For more information contact: CED Brussels Office, Tel: + 32 2 736 34 29 ced@cedentists.eu / http://www.cedentists.eu

us preserve our faith in our daily lives and difficulties and for St Apollonia to bless the city of Catania which withstood the earthquake of 1693, and as well as St Agata another patron saint, there is an altar dedicated to her in the Basilica. "Free us from all pain so we may live serenely in this life and we thank you in the glory of Paradise in eternal Life."

Information and picture kindly provided by Dr Tony Charles.

A SENSITIVE subject

Sensitive teeth? You can beat sensitivity pain fast thanks to a new toothpaste from Sensodyne

oes eating and drinking certain foods or drinks cause your teeth sensitivity? This short, sharp pain – often combined with wincing – is uncomfortable yet it's actually easy to treat.

Rather than avoiding your favourite food and drink, try using the Sensodyne Rapid Relief range to beat sensitivity pain fast. Available in Rapid Relief and Rapid Relief Whitening, this advanced range has been clinically proven to offer relief in just 60 seconds.

Frozen trea

Hot drinks

ALL SMILES

The Sensodyne Rapid Relief range is clinically proven to relieve the pain of sensitive teeth. The new and improved formula uses Stannous Fluoride to beat sensitivity pain fast. Formulated to create a physical seal against sensitivity triggers and when used twice daily, it provides long-lasting protection from sensitivity. And to effectively remove stains to restore the natural whiteness of your teeth*, try Sensodyne Rapid Relief Whitening.

SENSODYNE RAPID

IL NAME OF COLUMN PARTY.

SENSODYNE RAPID

*With twice daily brushing

Sensodyne is the number one dentist recommended brand for sensitive teeth

LET'S GET CRACKING!

By Tonio Agius MSc (Edin.) MMAP (Physiotherapist)

LET'S GET CRACKING....

UPPER 5 & LOWER 5 PROBLEMS IN DENTAL PRACTICE....

Introduction

- In Greek, "Ergo," means work and, "Nomos," means natural laws or systems.
- Ergonomics, therefore, is an applied science concerned with designing products and procedures for maximum efficiency and safety.

• Ergonomics modifies tools and tasks to meet the needs of people, rather than forcing people to accommodate the task or tool.



• Studies show that 1/10 dentists report having poor general health & 3/10 dentists report having poor physical state

JUST IMAGINE YOUR HEAD IS A BOWLING BALL BALANCED ON A WEAK SUPPORT......



- Ergonomics is concerned with the efficiency of persons in their working enviroment.
- It takes account of:
- · capabilities and limitations
- ensures tasks, equipment, information and the environment suit each practitioner

<section-header>

msd cvd neuro tumors others

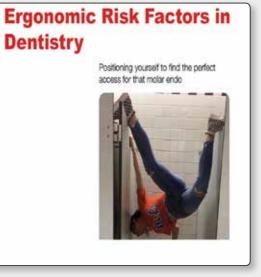


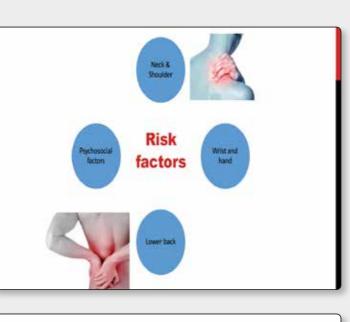


Continues from page 5.

Dentistry

environments.





MUSCULOSKELETAL DISEASES



SYMPTOMS OF DISCOMFORT FOR **DENTAL PRACTITIONERS**

APPLICATION OF ERGONOMICS

have been able to modify and optimise their working

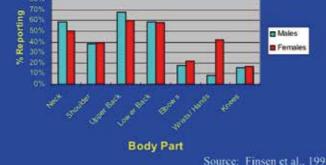
between job requirements and worker capabilities.

· Ergonomic advances made over the years, dental professionals

· Ergonomic improvements in seating, instrumentation, magnification, lighting, and gloves = proactive measure ensuring proper balance

WRISTS/HANDS (69.5%) NECK (68.5%) UPPER BACK (67.4%) LOW BACK (56.8%) SHOULDERS (60.0%)





Continues on page 8.



CURAPRC

Recommended by dentists - loved by their patients



Developed b curaden

Exclusively distributed by Chemimart tel: 2149 2212



Continues from page 6.

MSDs and Endodontists

- MSDs were reported by 61% of the participants. Of them, 69% reported pain to more than one body part.
- The prevalence of disorders was highest in the lower back (30%) and neck (30%).
- Awkward postures during practice (OR:4.561, 95% CI:1.341-15.512), regular stretching exercises (OR:0.032, 95% CI:0.010-0.110) and number of patients day(-1) (OR:3.524, 95% CI:1.686-18.100) were significant predictors for MSDs.

Musculoskeletal disorders amongst Greek endodontists: a national questionnaire survey.<u>Int Endod J.</u> 2014 Aug:47(8):791-801. doi: 10.1111/lej.12219. Epub 2014 Jan 11

- Conditions can vary from mild recurrent symptoms to severe and incapacitating.Early symptoms of MSDs include
- Pain
- Swelling
 Tenderness
- Numbness
 Tingling sensation
- Loss of strength.

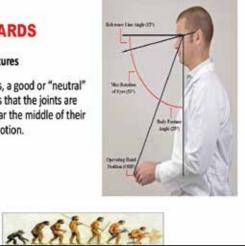


- Dental practitioners observed static holding postures = >50% body-musculature
- Static gripping >20 minutes also noted during instrumentation tasks within dental practice



MSD HAZARDS

- Awkward Postures
- For most joints, a good or "neutral" posture means that the joints are being used near the middle of their full range of motion.



- When arms fully outstretched, the elbow and shoulder joints are at the end of their range of motion.
- If an individual pulls or lifts repeatedly in this position, there is a higher risk of injury (OHSCO, 2007).



 Common awkward postures in dental practice include elbow and wrist flexion and thumb hyperextension, which have been shown to stress neurovascular structures and ligaments.



Figure 2A: Arms are held away from the body and wrists ar flexed and deviated. Figure 28: Trunk and wrists are positioned in neutral with proper patient positioning and use of the headnest.

STATIC POSTURES



- Static postures are defined by those which are held for a long period of time and may result in fatigue and injury.
- 30 degrees of forward shoulder flexion or abduction can cause a significant impairment in circulation within the shoulder / neck region

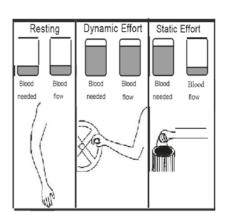
FORCE

• Excessive use of pinch grip = greatest contributing risk factor in the development of MSDs among dental practitioners





Septer



REPETITIVE MOVEMENTS

- Risk of developing MSD increases when same or similar parts of the body are used continuously, with few breaks or chances for rest.
- Highly repetitive tasks e.g. endodontic procedures = fatigue, tissue damage, discomfort and eventually injury.



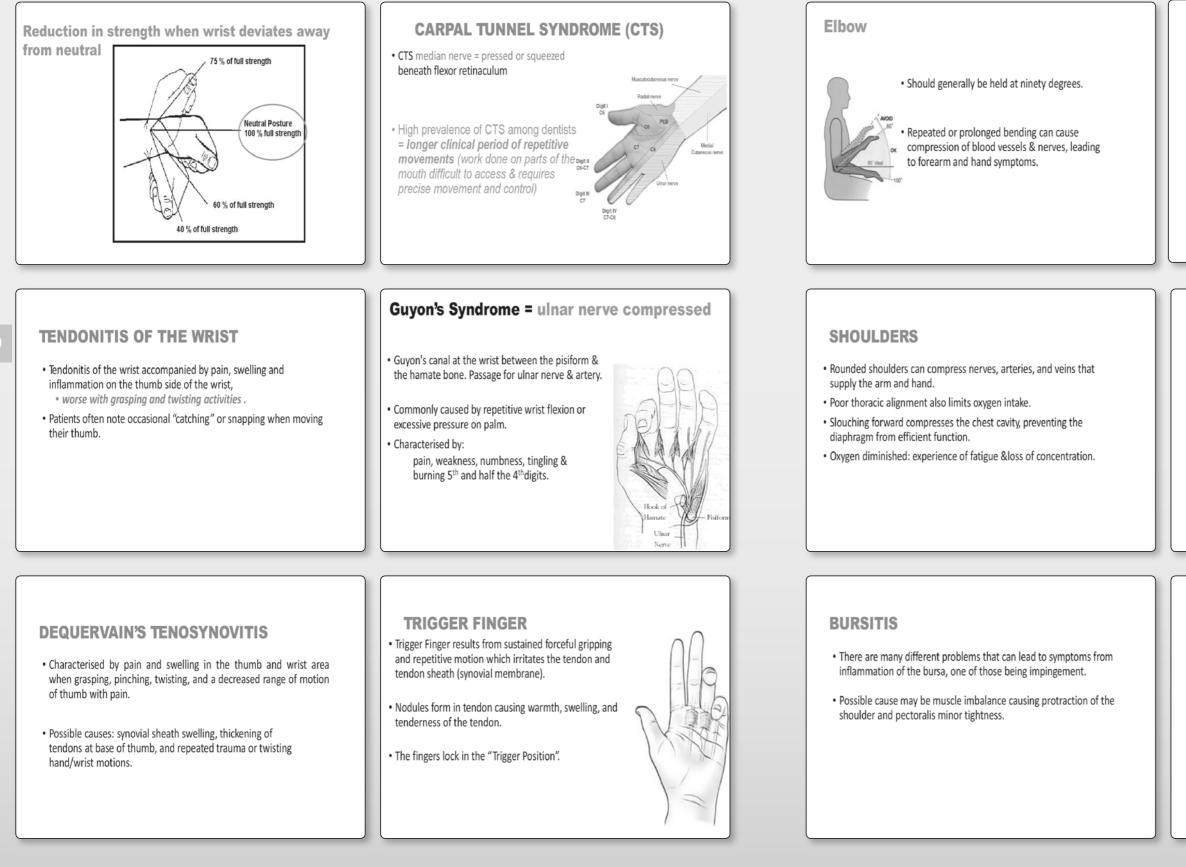
Wrist

- Constant demand, often sustaining excessive and repeated stresses and strains.
- Safest position = straight or neutral position.
- Avoid bending the wrist downwards (flexion) or outwards (ulnar deviation).



Continues on page 10.

Continues from page 10.





CUBITAL TUNNEL SYNDROME

- Cubital Tunnel Syndrome often caused by prolonged use of the elbow while flexed, resting the elbow on an armrest, or trauma from overuse can compress the ulnar nerve.
- It is characterised by pain, numbness, tingling and impaired sensation in the little and ring fingers, side and back of hand, loss of fine control, and reduced grip strength.
- Sometimes confused with *Epicondylitis*



Figure 2. Keeping the point of force application close to the body reduces the moment arm of the action force applied at the tooth/instrument interface.

THORACIC OUTLET SYNDROME (TOS)

- Compression of nerves, arteries, and veins as they pass through from the neck to the arm (thoracic outlet).
- Possible causes: tight scalenes and pectoralis muscles, extra cervical rib, and prolonged duration of working with elevated elbows
- Characterised by neck pain, shoulder, arm or hand, numbness and tingling of fingers, muscle weakness/fatigue, and cold sensation in the arm, hand or fingers.

Continues on page 12.

AN OVERVIEW OF GDPR

Continues from page 11.



supraspinatus, infraspinatus, teres minor and subscapularis.

The RC assists with both gross and fine motor control of the arm.

RC injury tends to occur where the muscle's tendon attaches to the bone.

NECK

- · Pain and discomfort are the most common complaints reported in the neck/shoulder region amongst dental professionals.
- Studies have also shown that female dentists reported neck symptoms 1.4 times more often than male dentists (Mangharam, 1998)
- The slight inward curve of the neck balances the head on the spine.
- · Holding the head forward disturbs this balance, straining the joints and the muscles of the neck and upper back.
- This posture also causes compression of the nerves and blood vessels as they exit the neck, leading to symptoms in the arm and hand.

MYOFASCIAL PAIN DISORDER (MPD)

· MPD is characterised by pain and tenderness in the neck, shoulder, arm muscles, and a restricted range of motion.

Possible causes include overloaded neck/shoulder muscles.

CERVICAL SPONDYLOSIS

- This disorder is characterised by intermittent/chronic neck and shoulder pain or
- · Stiffness, headaches, hand and arm pain, numbness, tingling, and clumsiness.
- · Possible causes include age-related spinal disc degeneration leading to nerve compression and spinal cord damage, arthritis, and time spent with the neck in sustained awkward postures.

BACK

- Main risk factors associated with dental work are sustained awkward postures and poor seating.
- · Most individuals with low back pain do not simply injure their back in one incident but rather gradually over time.
- Repeated stresses from over the years begin to add up and slowly cause degeneration of various parts of the spine, resulting in low back pain.



TePe EasyPick[™]

Rounded top —

Wide silicone lamellae –



Strong, durable material

The secret lies in the combination of materials

TePe EasyPick[™] is recommended for daily use, alone or as a complement to other interdental cleaning products. The core is both stable and flexible, and the wide silicone lamellae clean efficiently between the teeth whilst feeling comfortable. TePe EasyPick[™] is made in Sweden and developed in close collaboration with dental experts. It is suitable for everyone who cares for their healthy smiles, wherever they go.

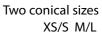
We care for healthy smiles

Available from Alfred Gera & Sons Ltd; 2144 6205







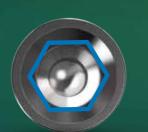




$\square e O$ **ONE NeO**, Multiple Options







Connection Narrow Conical (CHC)

Connection Standard Conical (CS)



COMING SOON! **NEW**

Grip Drivers

40,99



NEW Diameters (Ø 3.75, Ø 4.2, Ø 5)



NEW Mountless Packaging

DISTRIBUTOR:



Cherubino Ltd. Delf Building, Sliema Road, Gzira, Malta. Tel: (+356) 21 343270/1

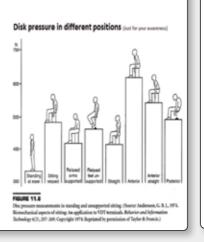


AN OVERVIEW OF GDPR

Continues from page 12.

DISC PROBLEMS

- · In a seated posture the pressure in the lumbar discs increases by 50%
- During bending (forward flexion) and twisting (rotation) motions of the spine, the pressure on the lumbar discs increases by 200%



APPLICATION OF ERGONOMICS

- · Through ergonomic advances made over the years, dental professionals have been able to modify and optimise their working environments.
- · Ergonomic improvements in seating, instrumentation, magnification, lighting, and glove use have offered a proactive measure for ensuring a proper balance between job requirements and worker capabilities.

SEATING

- · While arm support is a controversial subject, many clinicians and experts feel that they are essential to health and comfort.
- · If elbow rests are present, they should be positioned just below seated elbow height so that when the shoulders are not elevated when using the rests.
- · Some researchers have found the use of elbow rests to reduce upper trapezius muscle load as well as the frequency and range of arm abduction during regular dental tasks (Marchand, 2001).

Simplantology, in Everything We Do

SCIATICA

- Sciatica is characterised by pain in the lower back or hip radiating to the buttocks and legs, causing leg weakness, numbness, or tingling.
- It is commonly caused by bulging, prolapsed or herniated discs compressing a spinal nerve root and is worsened with prolonged sitting or excessive bending and lifting.
- Another cause: Piriformis syndrome (tight/shortened muscle)

SEATING

- · Proper seating is a complex subject about which there is much misunderstanding.
- Research findings indicate that dentists who sit 80 to 100% of the day are at an increased risk of developing low back pain (Mangharam, 1998).
- Studies have shown that the seat moves almost every minute throughout a typical treatment session, as the clinician is continually adjusting their positioning to improve visual access and accommodate patient movement.

SEATING

- With numerous designs currently available on the market, each chair has its own unique advantages and disadvantages.
- · As a result, it is important to speak with product specialists and try the chair under real working conditions before committing to purchase.

AN OVERVIEW OF GDPR

Continues from page 15.

PATIENT CHAIR

- When seating a patient, optimal results will be achieved when their oral cavity is positioned at a height equal to the seated height of the clinician's heart.
- · Positioning the oral cavity above heart level will limit vantage and increase the rate of shoulder fatigue.
- Positioning the oral cavity below the recommended height will result in non-neutral working postures including over declination of the head, forward and/or lateral bending of the torso, and inability of the clinician to access free movement in the clock positions.
- When the patient is properly positioned your shoulders, elbows, and wrists should be in a neutral position. • your upper arms are close to your body
- your elbow / forearm angle is close to 90º
- · your wrists are in line with the forearm with no more than 20-30° extension



INSTRUMENTATION

- . The design of dental instrumentation can play a key role in the prevention of negative health effects for its users.
- · The goal of proper instrument selection should be to reduce force exertion while allowing for neutral joint positioning.

HANDLE SHAPE AND SIZE

- · Dental instrument diameter ranges from 5.6 to 11.5 mm. Larger handle diameters reduce hand muscle load and pinch force, although diameters greater than 10 mm (3/8 inch) have been shown to offer no addition advantage (Dong, 2006).
- Alternating tools with different diameter sizes allows the user to reduce the duration of prolonged pinch gripping.
- . "No. 4" handle lessens pinch gripping and can be purchased for most instruments.
- · A round handle, compared to a hexagon handle will reduce muscle force and compression.

O Regular toothpastes⁺ only protect the hard tissue, which is 20% of the mouth²

COLGATE TOTAL®

TO 100% OF THE

PROVIDES PROTECTION*

MOUTH'S SURFACES¹

Colgate

O The remaining 80% of the mouth is the tongue, cheeks, and gums, which can provide a bacteria reservoir for plaque biofilm recolonization

WEIGHT

 Lightweight instruments (15 g or less) help reduce muscle workload and pinch force (Dong, 2006).

BALANCE & MANEUVERABILITY

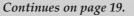
- Instrument should be equally balanced within the hand so that the tendency to deviate the wrist is reduced.
- · Second digit (index finger) can detect very fine movements and should be placed close to the operating point.

WHY SETTLE FOR 20% WHEN YOU CAN **OFFER PATIENTS PROTECTION TO 100%** OF THE MOUTH'S SURFACES?

*In addition to fluoride for cavity protection, Colgate Total® provides 12-hour antibacterial protection for teeth, tongue, cheeks, and gums. Defined as non-antibacterial fluoride toothpaste.

References: 1. Fine DH, Sreenivasan PK, McKiernan M, et al. J Clin Periodontol. 2012;39:1056-1064. 2. Collins LMC, Dawes C. J Dent Res. 1987;66:1300-1302.

Exclusively distributed by von Brockdorff Imports Ltd. - Tel: 2123 2141













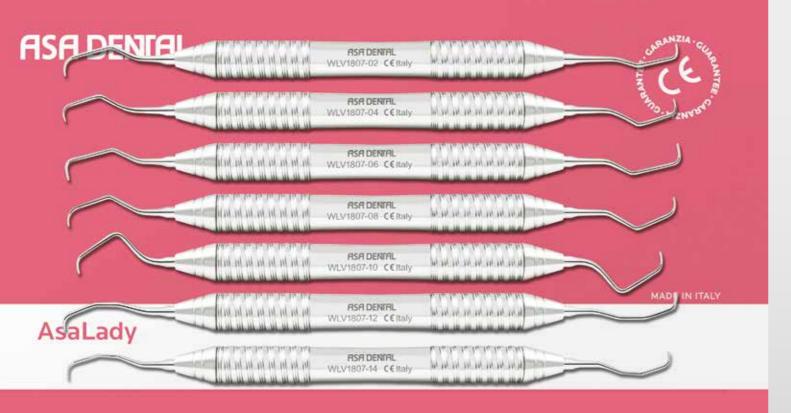


Cleaning & sterilization of reusable dental instruments

Steelco offers a comprehensive range of thermal disinfectors, sterilizers and accessories for the automated disinfection in dental practices. Our long experience in automated cleaning of surgical instruments in Central Sterile Supply Departments, in endoscopy centres and in private practices allows safe, efficient and cost effective cleaning, disinfection and sterilization procedures based on proven modern technologies.

MedinaHealth

Medina Healthcare Ltd. Tel: +356 21376774



DENTAL INSTRUMENTS

We cater to everything that concerns the health of your teeth and to make this world better by manufacturing and distributing

MedinaHealth

Medina Healthcare Ltd. Tel: +356 21376774

AN OVERVIEW OF GDPR

Continues from page 16. By not using the fourth digit as a stabiliser of the hand piece reduces the number of fingers in the oral cavity, improves the ability to position instruments, and involves as few joint segments as possible thereby improving the degree of control and providing enhanced tactile ability.

SHARPNESS

 As a tool becomes dull, additional force is required to perform tasks. As a result, it is important to maintain sharpness of the instruments.

ADDITIONAL TIPS FOR INSTRUMENT SELECTION:

- · Hollow or resin handles are preferred
- · Round, textured/grooves (knurled), or compressible handles are preferred
- · Colour-coding may make instrument identification easier
- · Carbon steel construction (for instruments with sharp edges) is preferred



EASE OF OPERATION

- . The easier it is to operate a tool, the better.
- · Less time is spent searching for buttons, thereby reducing the risk of error
- · Less time is also spent learning how to use the device. Simple activation is also important, such as using a foot pedal or handle turn to activate the tool as they do not require the operator to hold a button in a sustained pinch grip for extended periods of time.

Texture

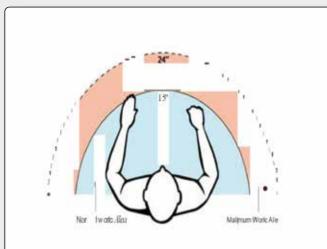
 Knurled handles such as diamond-shaped or crisscross patterns serve to reduce pinch grip force due to an increase in tactile sensation as a result of the knurl.



EQUIPMENT LAYOUT

- · Dental equipment should be located in a manner which allows you to maintain a neutral working posture.
- Frequently used items should be kept within a "comfortable distance" and not above shoulder height or below waist height.
- · Frequently used items such as the syringe, hand piece, saliva ejector and high volume evacuator should be positioned so they are within a normal horizontal reach which is the arc created while sweeping the forearm when the upper arm is held at the side.

Continues from page 19.



ULTRASONIC TOOLS

- While ultrasonic tools can serve to reduce prolonged pinch gripping they do expose the clinician to hand-arm vibration.
- While some studies indicate that prolonged use of this equipment can be hazardous due to the negative effects associated with vibration, other researchers suggest that its use is preferable to the heavy hand forces experienced during manual scaling.



CORD MANAGEMENT

- The added weight of cords can often influence the level of muscle fatigue experienced by a clinician.
- Additionally, coiled hoses can cause the hands and wrists to do more work if the coils have too much resistance to deformation.
- it is recommended that retractable or coiled hoses be avoided and replaced with a pliable hose which consists of a swivel mechanism in the barrel.
- Newer 360 degree swivel cords also provide increased flexibility for managing the cord. Positioning heavier cords over the arm or across an armrest can also be beneficial for reducing muscle strain (UBC, 2008).

MOUTH MIRROR

- Mouth mirrors have been referred to as the most important, yet underutilised instruments within dental practice. Good mirrors coupled with proper use can significantly increase one's opportunity to maintain a neutral working posture.
- It is important to remember that a mirror should be held lightly and lowered into the mouth with the handle held no more than 45 degrees from the vertical plane (University of British Columbia (UBC, 2008).

- As a general rule, the greater the force applied during a task, the greater the requirement for hand stability.
- Use of finger rests, dental practitioners can increase stability while also reducing muscular loading.
- The closer one can position their finger rest to the target area, the greater the level of micro-control will be achieved.

WORKING POSTURE & TECHNIQUES

- A neutral working posture is defined as one which supports uncompromised musculoskeletal balance of the clinician.
- most clinicians attempt to use a wide range of positions around the patient's head, often referred to as the "o'clock positions".



- For right-handed clinicians, working in the range from 7 to 9 o'clock is commonly associated with twisting of the trunk and neck as well as working with an elevated elbow posture in order to gain access.
- The mirror image (3 to 5 o'clock) is equally problematic for lefthanded clinicians. In an attempt to reduce such postural deviations a conservative range from 10 o'clock to approximately 12:30 is preferred and shown below

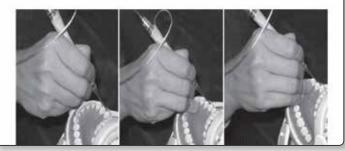
AMBIDEXTERITY

- Use of dominant hand when performing manual operations = improved efficiency
- · Can result in muscular overload of the dominant hand/arm.
- Recommended: attempt to alternate hands throughout the workday, whenever possible.
- May not be practical for certain precision tasks, alternate hands when performing accessory tasks, such as reaching for tools or supplies.

Septe

FINGER RESTS

2-finger rests = musculoskeletal advantages when performing scaling procedures. 3 different finger positions (no rest, 1-finger rest, and 2-finger rests) = significant reductions in thumb pinch forces and muscle activity when using rests.



SCHEDULING

- · Recommendations when scheduling include:
- Incorporate brief "stretch break" periods between patients
- Develop a patient difficulty rating scale to ensure difficult treatment
- · Sessions are not performed consecutively

STRETCHING

- Frequent stretch breaks can prevent detrimental physiological changes that can develop while working in static or awkward postures.
- To prevent injury to muscles and other tissues allow for rest periods to replenish and nourish stressed structures.

Probe

FDI white paper and practical guide address the global burden of periodontal disease

Geneva, 16 April 2018 - FDI World Dental Federation published two resources – a white paper and a practical guide – as part of its Global Periodontal Health Project (GPHP), which aims to bring attention to periodontal health as a priority area for policy worldwide.

"Periodontal disease – or gum disease as it is often better known - is one of the most common diseases affecting up to 50% of the adult population worldwide," said Dr Kathryn Kell, FDI President. "This should not be taken lightly, especially since we know it has a significant relationship with other health conditions. We must pursue prevention strategies that are promoted by oral health and general health professionals alike."

The White Paper on Prevention and Management of Periodontal Diseases for Oral Health and General Health provides oral health professionals with a comprehensive - yet concise summary of the main issues related to the global prevalence and impacts of periodontal disease. It also covers the aetiology and pathogenesis, prevention, diagnosis and treatment of the disease, as well as identifies the key challenges in tackling the burden of periodontal disease.

The Periodontal Health and Disease – A practical guide to reduce the global burden of periodontal disease is based on considerations from the white paper and the 2017 FDI World Oral Health Forum, which focused on global periodontal health. It introduces periodontal health and sets the context for the global burden of periodontal disease. It provides practical guidance for National Dental Associations to design, conduct and evaluate advocacy campaigns that will advance the implementation of policies to prevent and manage periodontal disease.

"We are very pleased with the outcome of these publications," said Prof. Lijian Jin, Chair of the GPHP Task Team. "The white paper sets out an action plan on the prevention and management of periodontal disease. The practical guide helps oral health professionals establish advocacy goals that will reach policymakers and contributes to implementing successful campaigns. We expect these documents to be used widely by our peers and help enhance periodontal health globally."

Periodontal disease is largely preventable and represents a major global oral disease burden. It begins as gingivitis (inflammation of the gums) and may progress to periodontitis (destroying toothsupporting tissues and bone). It is also closely associated with noncommunicable diseases as they share common risk factors (unhealthy diet, tobacco use, excessive alcohol consumption). The white paper was just included in the April issue of FDI's International Dental Journal. Both the white paper and practical guide are freely available on the FDI website and print copies will be distributed at the FDI World Dental Congress in Buenos Aires, Argentina. GPHP is a multi-partner project supported by Electro Medical Systems (EMS), GlaxoSmithKline (GSK), and Procter & Gamble (P&G).

ARE YOU LOOKING FOR A PROFESSIONAL **INDEMNITY POLICY OR ABOUT TO RENEW** YOUR POLICY? **SPEAK TO MIB!**

Together with the Dentists Association of Malta, MIB have set up a scheme exclusively for the members of DAM.

This scheme includes the following:

- Most competitive premium available for Professional Indemnity cover in Malta & Gozo;
- Widest cover available;
- Various Limits of Indemnity to choose from;
- Optional extensions to choose from including: o European Jurisdiction
 - o Retroactive Cover
 - o Botox & Dermal fillers extension
- Claims support in the event of a claim

On the other hand if your policy is already insured under the scheme, you need to ensure that:

- Your limit of indemnity is still adequate;
- Your cover still reflects your present operation, example if you are performing Botox &/or Dermal fillers you have availed yourself of the relative extension.

Contact MIB for a no obligation quotation on: T. +356 234 33 234 E. info@mib.com.mt or contact Tonio Borg using the details below.



Tonio Borg ACII Divisional Director – Business Development T. +356 234 33 142 M. +356 794 53 647 E. tonio_borg@mib.com.mt www.mib.com.mt



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





Professional Indemnity Insurance Exclusive scheme for dentists

PREFERENTIAL RATES

ERRORS & OMISSIONS COVER **DEFENCE COSTS RETROACTIVE COVER** CLAIMS SUPPORT SERVICES CONSULTANCY ON ALL YOUR INSURANCE REQUIREMENTS

For further information please contact: Tonio Borg

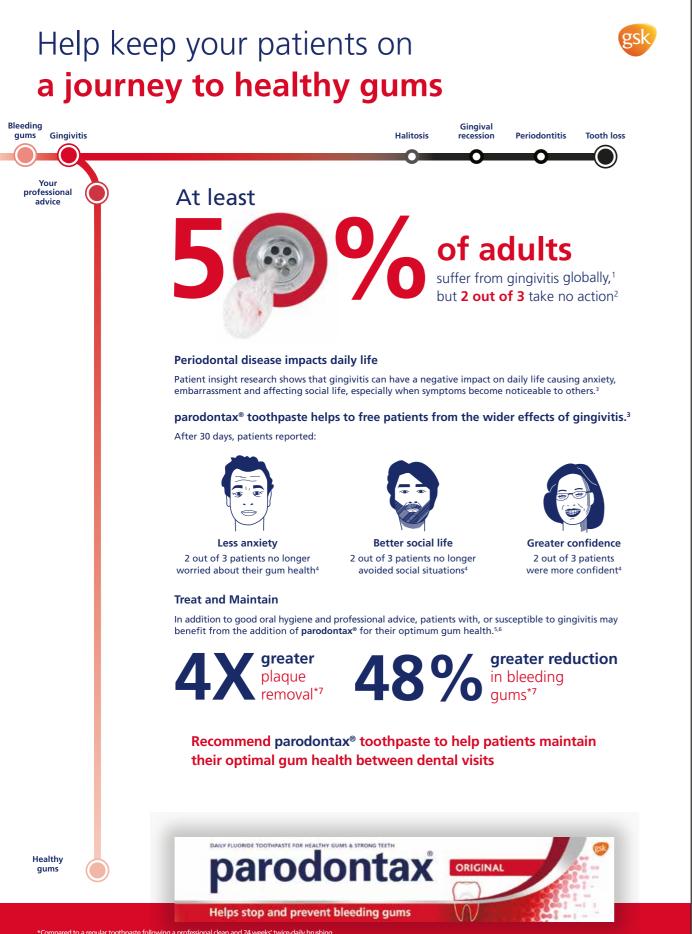
T. +356 234 33 142 M. +356 794 53 647 E. tonio borg@mib.com.mt

Mediterranean Insurance Brokers (Malta) Ltd. 53, Mediterranean Building, Abate Rigord Street, Ta'Xbiex, XBX 1122, Malta (EU) T. +356 234 33 234 F. +356 213 41 597 E. info@mib.com.mt

This scheme is being underwritten by GasanMamo Insurance Co. Ltd



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



References: 1. CDC Perio 2016; Half of American Adults have Periodontal disease 3: Data on file, GSK, parodontax[®] Segmentation, August 2015. 3. Data on file, GSK, Firefish: Putting the patient first. Life impact of gum disease, March 2016: 4. Data on file, GSK, Taste Adoption study (m=600), Italy 2016: 5. Kakara A et al., Evaluate the Efficacy of Different Concentrations of Sodium Bicarbonate Toothpastes. IADR General Session and Exhibition, Gape Town, South Africa, 2014. Abstract Net: 754.6. Data on file, GSK, RH01530, January 2013. 7. Data on file, GSK, Holdsate JBC, State Adoption Study (m=600), Italy 2016: 4. Data on file, GSK, Holdsate JBC, State Adoption Study (m=600), Italy 2016: 3. Data on file, GSK, Holdsate JBC, State Adoption Study (m=600), Italy 2016: 3. Data on file, GSK, Holdsate JBC, State Adoption Study (m=600), Italy 2016: 3. Data on file, GSK, Holdsate JBC, State Adoption Study (m=600), Italy 2016: 3. Data on file, GSK, Holdsate JBC, State Adoption Study (m=600), Italy 2016: 3. Data on file, GSK, Holdsate JBC, State Adoption Study (m=600), Italy 2016: 3. Data on file, GSK, Holdsate JBC, State Adoption Study (m=600), Italy 2016: 3. Data on file, GSK, Holdsate JBC, State Adoption Study (m=600), Italy 2016: 3. Data on file, GSK, Holdsate JBC, State Adoption Study (m=600), Italy 2016: 3. Data on file, GSK, Holdsate JBC, State Adoption Study (m=600), Italy 2016: 3. Data on file, GSK, Holdsate JBC, State Adoption Study (m=600), Italy 2016: 3. Data on file, GSK, Holdsate JBC, State Adoption Study (m=600), Italy 2016; 3. Data on file, GSK, Holdsate JBC, State Adoption Study (m=600), Italy 2016; 3. Data on file, GSK, Holdsate JBC, State Adoption Study (m=600), Italy 2016; 3. Data on file, GSK, Holdsate JBC, State Adoption Study (m=600), Italy 2016; 3. Data on file, GSK, Holdsate JBC, State Adoption Study (m=600), Italy 2016; 3. Data on file, GSK, Holdsate JBC, State Adoption Study (m=600), Italy 2016; 3. Data on file, GSK, Holdsate JBC, State Adoption Study (m=600), Italy 2016; 3. Data on file, GSK,

FRONT OF HOUSE AND BACK OF HOUSE SKILLS – PAVING THE WAY TO A POSITIVE PATIENT EXPERIENCE

By Dr Ethel Vento Zahra BChD (Melit.), MSc (Melit.)

The Positive Patient Experience

What is it? Why does it matter?

• The best way to understand the importance of your patients' experience with your practice is to put yourself in their shoes.

Front of House

Starting off the positive patient experience

- For a dental practice, nothing matters more than being able to count on a set of loyal patients who attend regularly and recommend the practice to their friends and family.
- Retaining existing patients is substantially less expensive than having to put in the effort to acquire new ones, but retaining existing patients requires more than just offering passable service, convenient hours, and an easy-to-access location.
- It's about engaging patients, earning their trust, and consistently providing them with a patient centred positive experience when they visit.

Consider these questions, not as a dental professional, but as a patient:

- What would you want and expect from your dentist?
- What would you want and expect from the members of the dental team?
- What makes a dental visit a positive experience, even if the treatment or care provided involves discomfort?
- What makes you willing to return to the same practice?

The answers to these questions can make a huge difference in your ability to develop positive relationships with your patients.

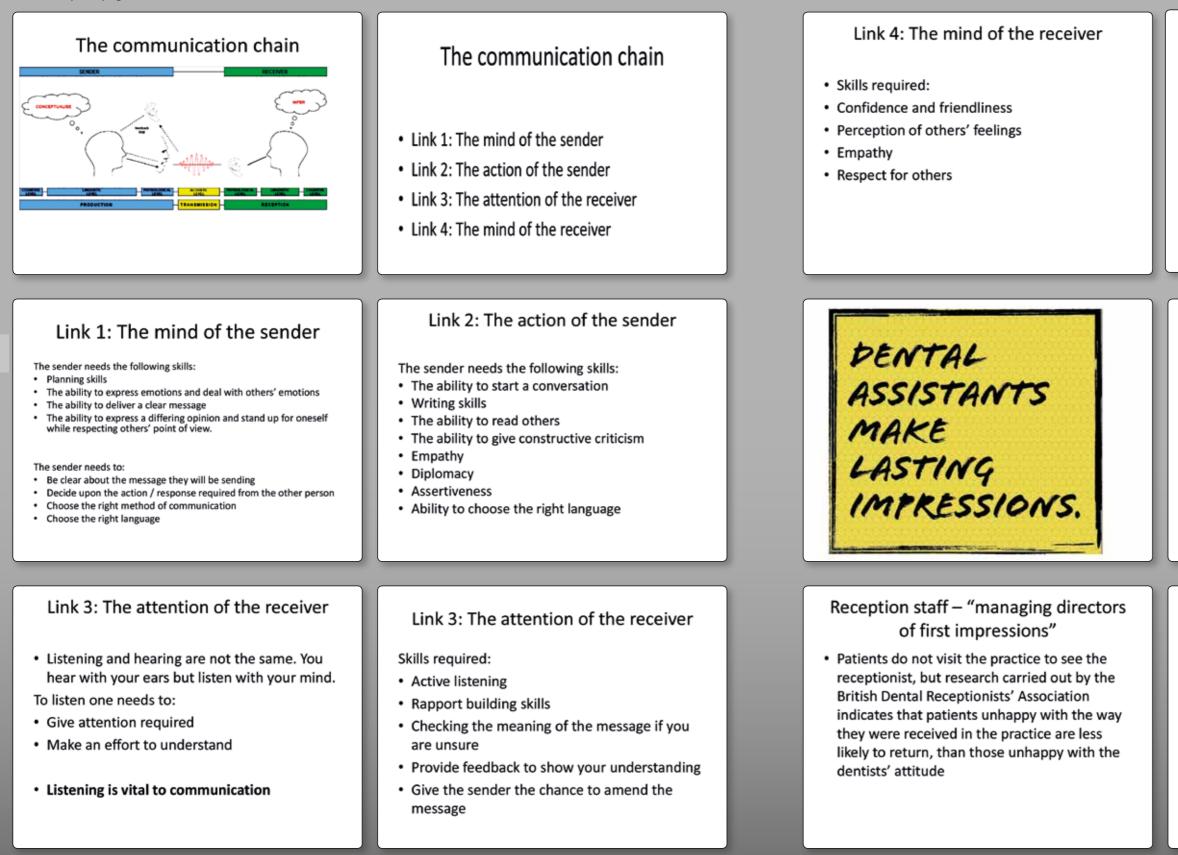
Communication

- Very important to have a good team that communicates effectively - this brings about a bond in the practice community
- Communication uses your whole body and mind, not just your words
- Effective communication is when messages are **sent**, **received and understood**

FRONT OF HOUSE AND BACK OF HOUSE SKILLS

- PAVING THE WAY TO A POSITIVE PATIENT EXPERIENCE

Continues from page 25.



Front of House

Communicating with patients

Front of House

- Hub of practice communications is reception area
- Quality of communication here has a major impact on business and interpersonal relationships
- Reception is the link between all part of the practice

Reception staff – "managing directors of first impressions"

- Clear
- Courteous
- Respectful
- Caring
- Well groomed
- Smart and tidy

mber 2018 – Issue 67 27 The Dental Probe

FRONT OF HOUSE AND BACK OF HOUSE SKILLS

- PAVING THE WAY TO A POSITIVE PATIENT EXPERIENCE

Continues from page 27.

continues from page 27.		
There are NO BADDANS in dental	 The right first impression Research shows – the time spent in the reception area waiting for their appointment is the most anxious part of their visit Reception areas need to be as calm and pleasant as possible: Airy, uncluttered, tidy Music, TV, wifi A welcoming environment coupled with efficient and considerate customer care procedures patients' anxieties can be considerably reduced 	AHAPPYPatientImage: Comparison of the second dependence of the second
 Greeting patients When two people first meet, perceptions are formed that form the basis of their relationship Making eye contact, smiling, speaking politely-increase comfort and cooperation between people Failing to recognise the presence of another person, not making eye contact, using terse language – rejection. 	 Greeting patients Acknowledge the presence of the patient with eye contact and a warm smile within 5 seconds of them arriving. Respectfully ask their name Ask them to take a seat and inform them of any delays likely to affect their appointment Request - don't demand - that new patients fill out needed forms and briefly explain why they are needed. Don't rush them. Point them to reading material if they will have to wait. If they have children with them, ask the children's names and show them the toys or children's books you keep in the clinic. Don't be too chatty, but do respond kindly if they want to talk to you. 	Understanding patients' rights Treat information about patients as confidential and only use it for the purposes for which it was given Prevent information from being accidentally revealed and prevent unauthorised access by keeping information secure at all times
 Description of first contacts patients make with a practice are over the telephone Good telephone skills are extremely important-project consistent professionalism in customer care Smile as you answer and throughout the call. Introduce yourself and say the name of the practice. Ask for their name and contact information – and write it down. Ask if there is any special reason or event that prompted them to call now. Give them at least one option for solving the problem. Invite them to book a consultation appointment. 	Which should take priority: A ringing telephone? or the patient at the desk?	Front of House Using the appointment book/system

Front of House

Understanding patients' rights

Situations where unintentional disclosure of information could occur

- Responding to an enquiry on the phone from an employer, school or relatives asking about patients' whereabouts or appointments
- Being overheard when talking to patients

Using the appointment book/system

- An appointment system is an essential tool for a practice
- A well planned and managed appointment system streamlines services to be timely with few delays for patients and clinicians
- Emergency policy of the practice
- Recall systems (calls, sms, letters, emails)

FRONT OF HOUSE AND BACK OF HOUSE SKILLS

- PAVING THE WAY TO A POSITIVE PATIENT EXPERIENCE

Continues from page 29.



Back of House - technical skills

- Workplace safety
- Principles of X-ray generation
- Radiation Protection
- Radiation Equipment and films
- Intra-oral exposure techniques
- Radiographic instruments
- Sterilization and disinfection

Clear protocols

- Need to be developed by the team
- Consistent systems to ensure positive customer experiences lead to cooperative and collaborative relationships
- Planned and recorded protocols kept in a procedure manual
- All team members need to be aware of these protocols

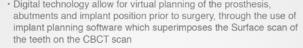
Checklist for Providing a Positive Patient Experience

- Develop the right attitude and stick to it.
- Greet patients and prospective patients with a smile on the phone or in person.
- Think of your dentistry business as a 5-star luxury service business.
- Give patients the benefit of your education and experience

 then let them decide.
 Give patients the formula decide.
- Give patients the focused, unrushed attention they need to feel valued.
- Have everything prepared in the surgery to avoid having people wait for long periods of time
- Respond to each patient visit the same way you do when they first come to your office.

Mr. Matt Perkins BDS MSc MClinDent MFD RCSI FDS RCSEd Specialist in Periodontics, ITI Fellow

<section-header><image/><image/><image/><image/><section-header><section-header><section-header><section-header><section-header><text></text></section-header></section-header></section-header></section-header></section-header></section-header>	 DIGITAL DENTISTRY AT EVERY STAGE Initial presentation - records Diagnostic phase - digital wax-up, implant planning Intra-operatively - guided surgery Restorative phase - fixture head impressions Lab phase - CAD CAM abutments
 Defension of the province of the prov	 IMPLANT RECORDS IN THE DIGITAL AGE Intraoral scan - iTero etc Can be done by nurses saving surgery time Scanning of impressions Scanning of study models Massive saving of space, time and money
 IMPLANT TREATMENT PLANNING Careful and comprehensive treatment planning prior to implant therapy enhances treatment outcomes Prosthetically driven treatment planning enable optimal implant position to be realised relative to the final prosthesis. 	IMPLANT TREATMENT PLANNING • Computer Guided surgery is defined as the use of a static surgical template that reproduces the virtual implant position directly form computerised tomographic data and does not allow for intra-



lofac Impants 2004;19(suppl); 43-6

- operative modifications of the implant position
- · Implants placed using computer guided surgery with a follow-up of at least 12 months demonstrate a mean survival rate of 97.3% (n=1941)
- Most software produces a static guided surgical template

NEW

HELPS

REJUVENATE GUMS & REPAIR ENAMEL





Did you know that most oral care problems originate from gums or enamel?

It provides antibacterial, action on gums



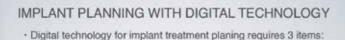
*In laboratory study on weakened ename



It defends teeth against acid erosion and helps repair the enamel

Continues on page 34.

Continues from page 32.



- 1. CBCT to provide Dicom Data (where available)
- · 2. STL file or other Surface Scan of the clinical situation & Diagnostic Final Tooth Position
- · 3. Implant planning software to integrate these images together and plan the case





Stl. File or surface scan

accurately performed.

· Consideration to the following;



CBCT SCAN

· Isolating the arch of interest in the CBCT may be required so

that subsequent position of the surface scan can be

· Retraction of the lips from the teeth

· Separating the upper and lower teeth

CBCT SCAN

The imaging for pre surgical implant planning should provide:

the morphologic characteristics of the alveolar ridge

· determine the orientation of the residual alveolar ridge

· identify local anatomic or pathologic boundaries within the region limiting implant placement

A small or wide field scan would be considered depending on the treatment being planned

STL OR SURFACE SCAN

The surface scan can be produced in 2 ways:

Directly from an intra-oral scan of the patients mouth

A conventional impression is made of the patients mouth which is either.

scanned itself in an impression scanner

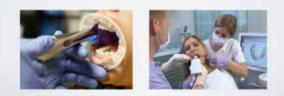
-poured with dental stone to produce a physical model which is subsequently scanned

- Accuracy for both techniques is similar, however the presence of large edentulous sites would be preferably managed with a conventional impressio

tet J Comput Dent. 2011;14(1):11-21. Full arch scane: conventional versus digital impressions-an in-vitro study. Ender A1. MeN A.

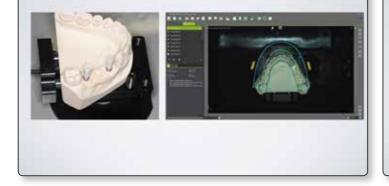
DIRECT INTRA-ORAL SCAN

- An intra-oral scanner can be used to create the surface scan in the patients mouth directly
- · Some of these scanners will require a powder application prior to scanning while others can scan without powder.



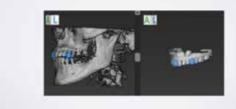


SCAN OF THE MODEL



IMPLANT PLANNING SOFTWARE

- The CBCT scan and the Surface scan of the clinical situation will be merged in the Implant Planning software to create the virtual patient
- · Accurate alignment is critical to ensuring that the resulting positioning of critical anatomical structures is precisely seen



IMPLANT PLANNING SOFTWARE

- A virtual prosthesis design would be considered when there is adequate surrounding teeth to guide the clinician to the final tooth position
- . This virtual prosthesis may be able to be imported to match with patient photographs providing a virtual patient for the previewing
- · This is most likely indicated in
 - · Single tooth replacement sites
 - · Short span posterior bridges



- · Implant planning software will enable the user to virtually plan the optimal implant position regarding the surrounding vital anatomic structures and the future prosthetic needs
- . The design of the prosthesis can be
 - · Virtually Planned
 - · A physical wax up or the final tooth position which is also scanned

September

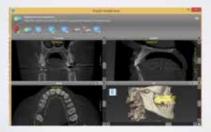
2018

67

The Dental Probe

IMPLANT PLANNING SOFTWARE

· Alignment of the surface scan to the CBCT can be finely adjusted after automatic adaption based on software registration





Continues on page 36.

Continues from page 35.

The Dental Probe

September 2018 – Issue 67

IMPLANT PLANNING SOFTWARE

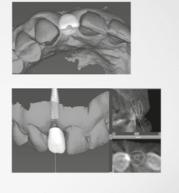
- Treating Clinicians can be invited to collaborate electronically
 on the case prior to the implant position being confirmed.
- Mobile Tablets can often be used to preview the implant position allowing acceptance of the implant position
- When confirmed a virtual surgical guide can be designed for production





IMPLANT PLANNING SOFTWARE

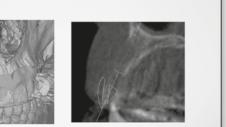
 Planning software can be useful tool to communicate to the patient and other clinicians involved in the treatment the impact of boney deficiency and the requirement for augmentations



IMPLANT PLANNING SOFTWARE

 Decisions can then be made on the most optimal treatment sequence i.e.. simultaneous implant placement and grafting or stage grafting procedures







PAYMENT FORM

Please cut out this section and send with a cheque for 50 euro payable to **Dental Association of Malta** for your 2018 DAM membership – the best 50 euro investment ever!

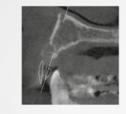
The Treasurer, Dr Noel Manche,

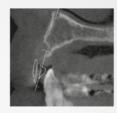
The Dental Association Of Malta, Federation Of Professional Associations, Sliema Road, Gzira.

NAME:			
ADDRESS:			

IMPLANT PLANNING SOFTWARE

 The virtual plan also allows for various implant types to be trialled which which may allow for less invasive treatment procedures to be performed

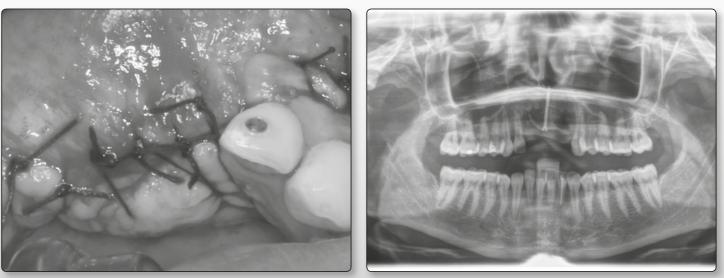




Bone Level Taper Implant

Straight wall Implant





IMPLANT PLANNING SOFTWARE

- The definitive prosthetic plan can be confirmed in the virtual treatment plan prior to implant surgery with virtual abutments being installed
- Correct Emergence profiles can be planned
- Decision on Implant depth can be confirmed
- Screw vs cement retention can be decided upon



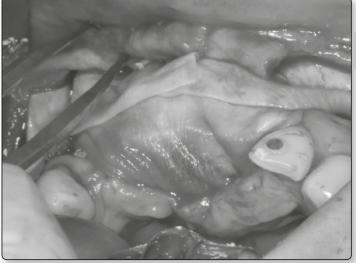


September

2018

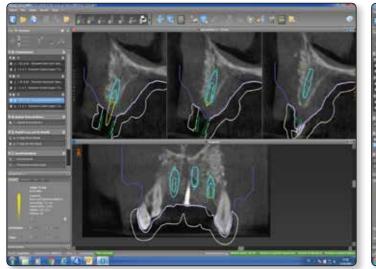
67

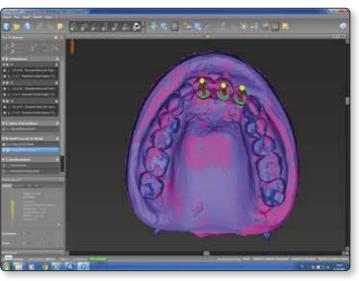
Dental Prob



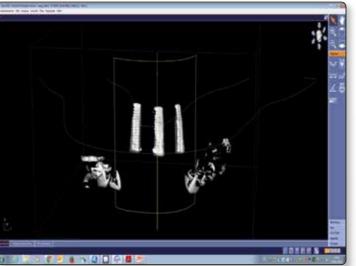
Continues on page 38.

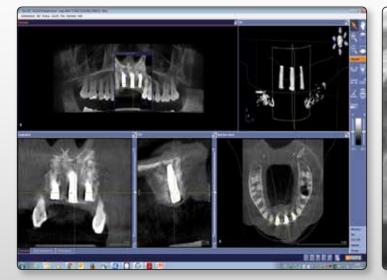
Continues from page 37.













A N N N N **"BECAUSE IT IPS**



More and more dentists and dental lab technicians rely on IPS e.max, the clinically proven all-ceramic system that offers high esthetics and dependable strength. 75 million restorations placed attest to this. From crowns, inlays, onlays, thin veneers and abutments to bridges - make the choice more dental professionals make... MAKE IT e.max!

www.ivoclarvivadent.com Ivoclar Vivadent AG ndererstr. 2 | 9494 Schaan | Liechtenstein | Tel.: +423 235 35 35 | Fax: +423 235 33 60

" THE WORLD'S MOST USED' ALL-CERAMIC SYSTEM





30WATTS THE POWER TO DO MORE.

With its proprietary SteadyTorque [™] technology, the Tornado turbine delivers a power output that is hard to resist. Get used to doing more in less time.

SWISS 🚹 MADE

ALL-NEW TORNADO TURBINE

www.bienair-tornado.com

PAGETECHNOLOGY LTD are the official distributors & after sales agents for Bien-Air Dental in Malta & Gozo



Tel: 2735 5564 | Email: info@page.com.mt | Web: www.page.com.mt Address: 77, P. Indri Vella Street, Pembroke, PBK 1311, MALTA