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The Maltese Dental Journal

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Editorial

DENTAL ASSOCIATION OF MALTA
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By Dr David Muscat

Dear colleagues,

The efficient Covid-19 vaccine rollout was aided by medical and dental professionals. In particular one must stress the impact the Dental Faculty (together with the dental students) has had on the success.

The Summer season is upon us and hopefully the herd immunity will tide us over and see us through this.

The DAM committee is meeting with the Commission For Rights of Persons With Disability (CRPD) regarding the issue of wheelchair access in clinics especially those that have been established for some time.

There has been a recent upsurge in Maltese patients travelling to a non-EU Country for dental treatment.

These patients are returning to Malta and landing on our doorsteps with substandard work, pulpitis, extreme pain, veneers falling off, TMJ pain etc.

Patients need to realise that one cannot simply fly out for a couple of days and have a full mouth rehabilitation. This is high risk. With dentistry there is an element of planning and maintenance.

In addition one needs to look at the medico legal implications of taking on a patient who has had treatment carried out abroad .

There is also the element of advertising by these non EU companies and dentists for patients to travel abroad and enticing them with offers. This is very wrong.

The DAM has finalised negotiations regarding the wording of Dental Indemnity insurance so as to only exclude Covid 19 and not all other infectious diseases from our policies .

We are currently totally refurbishing out office at the Federation of Professional Associations in Gzira.

I would like to once again appeal to my colleagues to contribute articles and cases for our Journal.

LATEST UPDATE ON WHO AND ORAL HEALTH

On 28 May 2021 the World Health assembly adapted the WHO resolution on oral health .
An action plan will be implemented in countries including the EU,EEA and candidate countries.

In 2022, a global strategy on oral disease will follow in the WHO.

By 2023 a WHO's 'Oral Public Health action plan 'will be drawn up .

It will monitor progress in the membership states WHO(focusing on preventative measures and access to primary oral health care as part of universal health coverage)of professionals (with an expected better participation in natural policy making but also in the creation of intermediary professions) and of patients.

The cover picture is a painting by Professor Victor Grech entitled 'Dghajsa.'

Best regards,

David

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

The Santo Spirito Hospital, Rabat

This is one of the World's oldest hospitals. The hospital houses the National Archives. It ceased to function as a hospital in the early sixties and also houses an old pharmacy museum. This 1300s pharmacy was restored on the initiative of Mr Michael Bonnici, a pharmacist by profession who furnished it with his own stock of chemicals and dispensing equipment.

Mr Michael Bonnici died recently. He hailed from Zebbug and was at one time a Member of Parliament and also Deputy Speaker of Parliament. He also served as Registrar of the Medical Council of Malta. The 'art of dispensing' must not be forgotten .

There were self prepared preparations meticulously dispensed from natural products. These prescriptions were supported by the British Pharmacoperas and the British Pharmaceutical Codex.

In the 14th century the site was an annex to a priory and a chapel. It was also later used as a hospital called St

Francis hospital catering for Malta's needs and it was financially supported by rents collected.

Continues on page 4.

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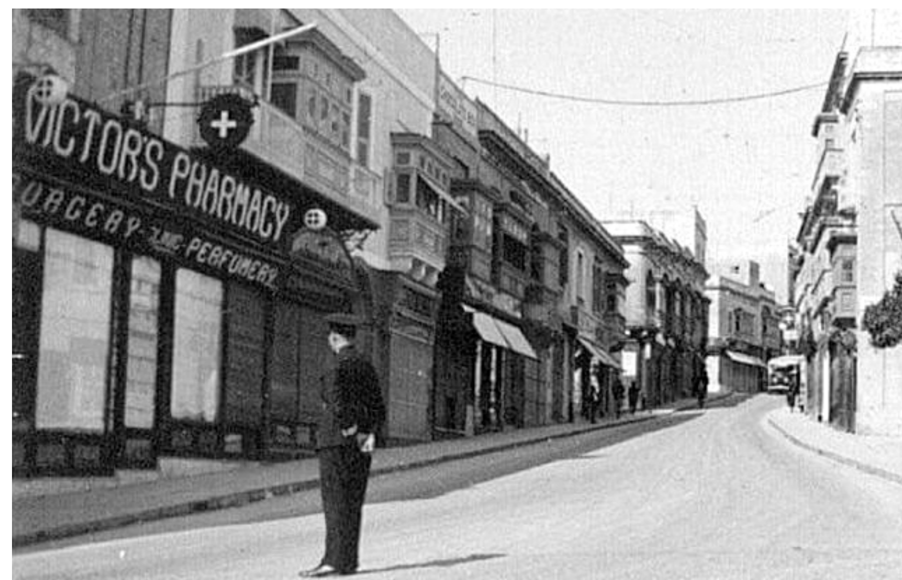
Victor's Pharmacy, Sliema

This pharmacy was established by Dr Victor Salomone in 1925. Dr Salomone was also a pharmacist but he chose the dental profession over the pharmaceutical one. He had also opened a pharmacy in Valletta called Victoria. The VJ Salomone company is over 125 years old.



The Santo Spirito Hospital, Rabat

Continues from page 3.

In 1433 it also housed orphans and unwanted children. Since 1615 it has a revolving cradle a 'ruota' where unwanted babies(foundlings) would be abandoned and placed discreetly-this is still there on the front of the building to the left.

This was the main hospital in Malta before the arrival of the knights in 1530. The Knights later changed the name to Santo Spirito.

The hospital is a memorial to public health and the profession of pharmacy and the art of dispensing. The hospital closed in 1967. It was very active during WW2.

Professor George Camilleri, a retired respected professor of oral surgery and former Dean of Dentistry worked as a part time volunteer sorting out the National Archives for three years.

The pharmacy museum includes equipment such as weights in avoirdupois, imperial and metric system. There are ceramic /terracotta jars, a pill machine, cachet machine, suppository moulds, small meta pans and spirit lamps etc.

The La Roche Building in Mqabba

There is an abandoned building in Mqabba on private land in a field bounded by Triq ic-Cavi and Triq Santa Marija that was built by Knight La Roche in the 16th Century. He was an ancestor of the founder of La Roche Posay-Fritz Hoffmann La Roche. The building is rumoured to have been a pharmacy close to a building nearby referred to as 'The Old Hospital,' which nowadays is a restored centre for activities by the local council.

It is said that the structure has a space in the middle where in medieval times pharmacists used to burn medicines for treatment and is the oldest pharmacy still standing in Europe. There have been calls for this abandoned building to be restored and to save it from ruin.

The surname descends from the La Roche Duke of Athens of the 12th Century. A connection between La Roche Posay and Malta is a 15th Century Chateau near Gencay in France called Chateau de La Roche. This is the only private museum dedicated to the Order of Malta. It was a wedding present in 1410 by Mrs La Roche to her husband Nicolas Gillier who formed part of the Court of King Charles VII. The castle was later inherited by Claude Brilhar, Knight of the Order of Malta .

La Roche Posay started in the village in the 14th century and later Napoleon built a large thermal spa as the water there was deemed to have therapeutic properties. In 1896 Fritz Hoffmann launched his company.

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MIND YOUR HEALTH

AN APPROACH TO THE DIAGNOSIS OF DEPRESSION AND ANXIETY IN OLDER PATIENTS

A CME Event held online on 13/1/2021

Dr Wilfred Galea interviews Professor David Mamo

Summarised by Dr David Muscat

Depression presents differently in older patients. In the context of stressors it is usually a biological one eg a fall. As presentation you see less of the effector response. What one sees are somatic symptoms. There is a sense of worthlessness, hopelessness and guilt. This is psychotic depression.

One needs a good history and an understanding of where it started. Look for the trigger. History repeats itself. Usually one misses the fact that these are pre war patients- they abuse alcohol and over the counter benzodiazepines. These complicate matters . There are huge suicidal thoughts, and this is the norm . Complicated suicides are common.

Most patients are on a dozen medications. Mood, fatigue, insomnia can occur in many conditions. It is better to be more sensitive rather than specific to the diagnosis. The symptoms are counted- this is useful for research. There is a standard of five symptoms or more . some medications can trigger depression. One looks for loss of weight and pale skin- may indicate GI tumours.

Regarding treatment one needs to ascertain as to whether this is mild or severe. If it is severe consider medication. The first line is SSRIs. Selective Serotonin Re Uptake inhibitors eg. Paroxetine. Some patients may have been on amitriptyline (tricyclic antidepressants) for many years.

Patients may present with symptoms such as loss of sleep, early morning awakening, anxiety, insomnia, worthlessness, 'no more place for me'. The nihilistic feeling is a major red flag. It is worth noting that many people actually have weapons at home.

Women usually have suicidal thoughts and these may be psychotic or delusional. The latter may be subtler eg.'there are things I cannot tell you .'"an inability to connect with you.'

Psychotic depression is common in the elderly. With suicidality you need a drug consultation process. Giving up is a universal phenomenon. The patient wants to talk about suicide.

One needs to investigate to exclude certain conditions. Co morbidity, early cognitive problems, mood and anxiety. Anxiety goes with depression. One needs to carry out an abdominal examination(GI tumours). One needs lab tests (Anaemia). Loss of occult blood. Check thyroid function tests -loss of sodium. It is important to note that the patient may be delirious rather than depressed.

Anxiety is very common in 15-50% of the elderly. It is usually co-morbidity with depression. An older patient does not mount an automatic response as would happen in a younger patient. One needs to look for somatic symptoms. There may be a fear of going out. Insomnia is a result of anxiety. The anxiety would have been there before. The patient is a worrier, and does not like being alone. If there is a new onset of anxiety this is a red flag. A cognitive disorder. One needs to bring in support systems. Parkinsons can also result in anxiety because of fear and the patient may not wish to speak to a therapist.

GI disorders may cause a retching heartburn. One may need to prescribe 20mg SSRIs or small dose of benzodiazepines. If a patent cannot sleep Mirtazapine may be prescribed. It is used to treat depression and improves mood and feelings of well being. It can make the patient sleepy. It works by restoring the balance of neurotransmitters in the brain. The trick is to use the medications side effects in the treatment. One needs to exercise caution when prescribing SSRIs in patients taking warfarin. The least likely to cause drug interactions are sertraline and citalopram. Paroxetine is low to moderate risk . The high risk SSRIs are fluvoxamine and fluoxetine.

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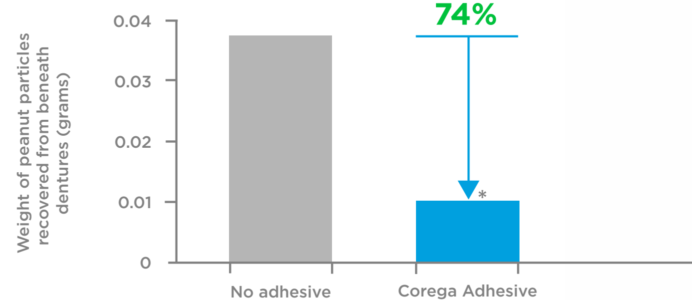

Randomised, blinded, 3-way crossover study to evaluate denture adhesive use against no adhesive use. Subjects with well made and well-fitting maxillary and mandibular dentures completed the study. Food entrapment was quantitatively measured by collecting and weighing residue from beneath the dentures after subjects chewed and swallowed 32 grams of peanut test meal.
*P<0.0001.

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Diagnosing Failures in Endodontics

By Dr Ritienne Galdes

B.Ch.D degree at the University of Malta in 2016.
Reading for an MSc degree in Endodontics at King's College London.
Clinical tutor at the Faculty of Dental Surgery, UOM.

The terms success or failure have been used for a long time in endodontics since this conveys both to the dentist and patient the outcome of treatment provided and whether further treatment is required. A definition or an agreement between endodontists of what constitutes failure does not exist or is not as clear-cut as practitioners would hope (1,2). Throughout history, it has been quite a dilemma whether failure of endodontic treatment should be diagnosed in cases of evidence of disease or only in cases which are symptomatic (3–5).

OPPOSING VIEWS ON FAILURE

Most endodontists fail to find an agreement on what constitutes failure. The main aim of endodontic treatment is to prolong the longevity of teeth in the oral cavity for as long as possible (6). A practitioner might agree with the view that as long the endodontic tooth can still be retained intra-orally, it has not failed. Others agree that failure should be diagnosed when the tooth developed a periapical radiolucency after treatment was done or the size of the area increased.

Other views describe failure when the area increased in size or when it failed to resolve after treatment (7). Some hold the view that a case cannot be called successful until the periapical area resolves completely(8). Cases in which the periapical radiolucency decreases but does not resolve completely are usually deemed as uncertain cases or are placed under a guarded prognosis (9).

The reliability of a diagnosis is placed under question due to differences of views. Kvist carried out a study to analyse differences in choice of treatment of general dentists in cases of endodontic failures. He offered five treatment options in view of a failed primary endodontic treatment these were; no treatment, monitor and wait, non-surgical retreatment, surgical retreatment or extraction. This was a good method to analyse inter-individual variation in treatment decisions. From the 157 GDPs, only 6% of them chose the retreatment of endodontic failure (4).

Goldman assessed the reliability of the diagnosis of success or failure in endodontic treatment cases. He compared the answers received from six examiners of 253 endodontic cases.

The results showed that six examiners agreed in their answers only 47% of the time and five out of six agreed 67% of the time (10). A year later he assessed intraobserver reliability, where three of the six original examiners reread the same 253 radiographs. The observers agreed with their own diagnoses 73.5%, 79.0% and 80.0% of the time (11).

Brynolf explained further that disagreement in radiographic interpretation was significant in the preoperative stages when the periapical condition needed to be analysed. The clinicians agreed more between themselves when the postoperative radiograph showing the periapical area was taken three times from different angles. The rise achieved in intraobserver agreement when comparing the results when a single radiograph to when the three radiographs were taken was of 17% (12).

AETIOPATHOGENESIS OF FAILURE

In order to diagnose failure, it is important to be aware of the factors that lead to the loss of endodontically treated teeth, such as; recurrent decay under extensively restored teeth, root fractures, missed root canals, accessory canals not filled, overfilled canals or clinicians' procedural errors.

The most quoted reason for failure is mixed re-infection of the root canal system. Lin found that the inflammation in the apical tissues was related to the amount of stainable bacteria present in the canals. He concluded that most treatment failures occur due to microbial infection (13).

Failure that is associated with microorganisms can occur due to anatomical difficulties and irregularities such as isthmuses. Thus, during diagnosis, one should search for areas through which bacteria could enter from such as leaking restorations.

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Diagnosing Failures in Endodontics

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Bacteria could also have been left in canals in the primary endodontic therapy due to inadequate instrumentation, poor aseptic technique or root canals which were not fully obturated. Failure can also be related to procedural errors such as broken instruments or root perforations. Persistence of apical infection can occur due to missed canals, insufficient instrumentation and dentinal tubules.

Thus, clinicians' expertise, specialisation and technique can also have a significant effect on the prognosis and diagnosis. Unfortunately, failures can still occur even when high standards are met, due to intricate root canal system which are complex and anatomically varied that cannot be reached with available instruments, for proper debridement(Siqueira and Rôças, 2009).

Other causes may lead to failure of the tooth that was root treated other than the actual endodontic treatment, such as placement of a non-satisfactory coronal restoration that could be the entrance point for new microorganisms or also delayed placement of the restoration.

It could be argued that cases such as the above should not be diagnosed as failures of endodontic origin. The causes of failure can be categorised into biological and technical factors (18). The table on the right summarises the aetiology of endodontic failure (2,19,20).

Other factors described by Daokar (2) that may influence the outcome include:

1. State of the pulp before commencement of treatment
2. The periodontal status of the tooth
3. Occlusal interferences
4. Level of cooperation of the patient
5. Canal calcifications
6. Quality of treatment provided

Table 1: Aetiology of Endodontic Failure

General factors leading to failure	Operative causes leading to failure
1. General factors such as age and nutrition	1. Anatomical variations or missed canals
2. Systemic diseases such as Paget's disease	2. Technical difficulties – mechanical, biological
3. Incorrect diagnosis	3. Broken instruments
4. Endo-periodontal lesions	4. Mechanical and chemical irritants
5. Altered canal space such as calcification	5. Iatrogenic errors – ledge formation
6. Internal resorption	6. Over or under filling, improper obturation
7. Vertical root fractures	7. Perforations
8. Traumatic injuries (may lead to complications such as resorption)	8. Infection – persistence of microbiota

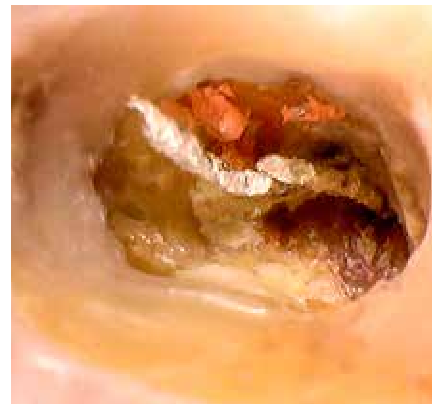
SYMPTOMATOLOGY IN ENDODONTIC FAILURE

Precise diagnosis of healing or non-healing can be determined through analysis of clinical signs and symptoms, followed by radiographic and histological examinations (21). The next step of the clinician should be to assess the symptoms and start removing options from the differential diagnosis.

The questions asked to the patient should also investigate the duration of the symptoms experienced by the patient other than only the nature of these symptoms. An important aspect in diagnosing failure of endodontically treated teeth is listening and understanding the patients' complaints.

These symptoms may include (1,2):

1. Pain and tenderness of tooth to percussion or palpation (25%)
2. An intra-oral swelling or abscess (15.9%)
3. Persistence of discomfort (27.3%)
4. Extra-oral swelling (15.9%, shared with number 2)
5. Pain on biting over tooth
6. Tooth mobility which may present as mild or significantly increased (4%)
7. Formation or persistence of a fistula (15.3%)
8. Root resorption (4%)



The percentages shown in the brackets, were the number of cases diagnosed with that particular symptoms in Seltzers' study in which he analysed hundred failed teeth. In many cases, more than one of the following were involved, often a combination of two or more.

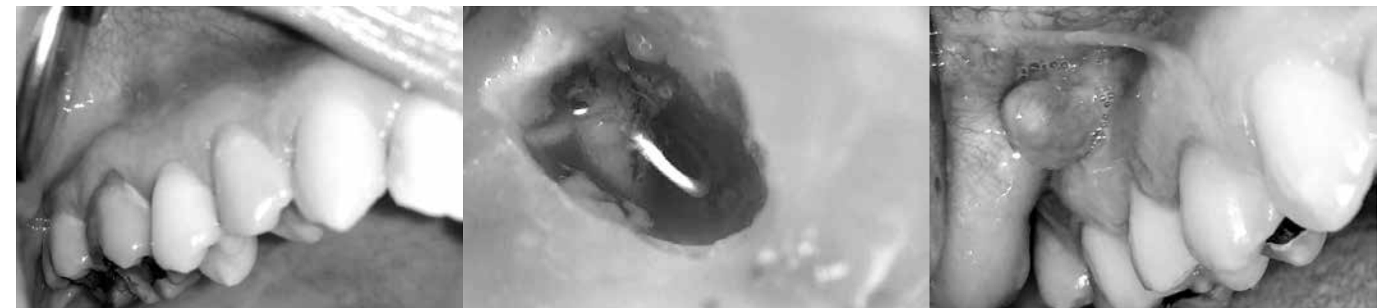
PRIMARY ROOT TREATMENTS

Danin(22) conducted a study to assess the management of non-healing periapical radiolucencies following a root canal treatment. The criteria used to assess healing or failure of repair was the one described by Rud.

This criteria correlated clinical, radiographic and histological findings(23). The characteristics used to divide the outcomes obtained are described in the table on the next page.

Table 2: Criteria of treatment outcome as described by Rud

Complete healing	Incomplete healing	Uncertain healing	Failures
Periodontal space restored to normal	Periodontal space still not healed	Pathology still present in the periodontal space	The periodontal space is diseased
Lamina dura can be followed	A lamina dura may form at the apex	The radiolucent area is symmetrically located apically	The lamina dura is absent
The radiolucent lesion healed completely	The radiolucent lesion remained the same size or started to decrease in size	The radiolucent area decreased when compared to the post treatment	The radiolucent lesion remained the same size or increased in size
A small defect in the lamina dura was accepted	The lesion tends to have an irregular pattern and bone lacks in the centre of the lesion	Some degree of bone regeneration can be noted periapically	There is no bone production



The presence of a periapical radiolucency does not necessarily mean failure of the primary treatment (24). Engstroom showed that in cases where the radiolucency was larger than 5mm at the beginning of the treatment, there was 50% failure rate after 4 years. When the area was less than 5mm, a 25% failure rate resulted. This study confirmed that the timing of the reviews carried out will impact the results(25).

Two other important factors that impact the outcome are the quality of the root canal treatment and the restoration placed coronally afterwards. Gillen (26) showed that the quality of the root treatment was affected by the elimination of microorganisms in the canal, the irrigation and disinfection and the technical quality of the obturations provided (27, 30).

A lot of debate has occurred throughout the years on whether the coronal seal achieved with a permanent coronal restoration exceeded the importance of a high quality endodontic treatment. The method used in this meta-analysis to assess the coronal and apical quality of the restoration is described in the table below (26).

Standards for outcome assessment of nonsurgical root canal therapy are fundamental. A scoring system was created to obtain more reliability and reproducibility. The Periapical Index (PAI) Scoring System is a radiographic assessment tool (31). This index introduced the idea of continuity between success and failure in cases considered as being in the phase of healing. The PAI is based on a study conducted by Brynolf(12) and is described in the scale below:

1. Normal periapical structures
2. Small changes in bone structure with no demineralisation
3. Changes in bone structure with some diffuse demineralisation
4. Apical Periodontitis with well-defined radiolucent area
5. Severe apical periodontitis with exacerbating features.

RADIOGRAPHIC SIGNS IN ENDODONTIC FAILURE

Strindberg (32) published a criterion to establish outcome through a periapical radiograph a few months after treatment is terminated. The parameters described were as follows (33):

- A successful outcome is described as one in which the patient has no symptoms, is functional and radiographically the PDL appears normal throughout the contour of the tooth and of equal width. The lamina dura should also be intact.
- Failure of treatment should be the diagnosis when symptoms are present. Radiographic signs include no difference or no reduction in the periapical radiolucency, complete resolution of the lesion is not seen, a radiolucency appears after treatment or the size of a previous lesion increases. A poorly defined lamina dura or break around the root is also indicative of failure.
- Doubtful cases which should be monitored before further treatment is carried out include cases when the radiograph is not clear enough for a certain diagnosis. Cases in which the periapical radiolucency is smaller than 1mm should also be monitored.

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Diagnosing Failures in Endodontics

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Numerous studies have reported that teeth which have an apical rarefaction before treatment is initiated have a higher chance of failure (34).

Chugal et al. (33) described radiographic features present in cases of treatment failure which are shown below; Radiographic features in cases of treatment failure include (33):

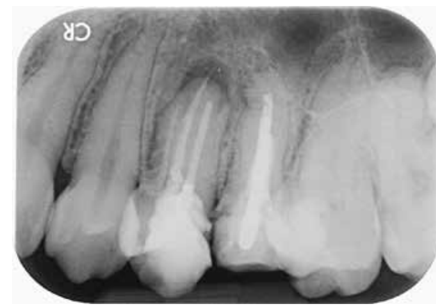
1. Increased width of periodontal ligament space of more than 2mm
2. Active resorption in the periapical areas
3. Absence of new lamina dura formation
4. Lack of bone production in the periapical radiolucency or even increase in the size of the radiolucency
5. Formation of a new periapical radiolucency
6. Void spaces in the obturation of the roots that are visible
7. Excessive extension of the obturating filling material

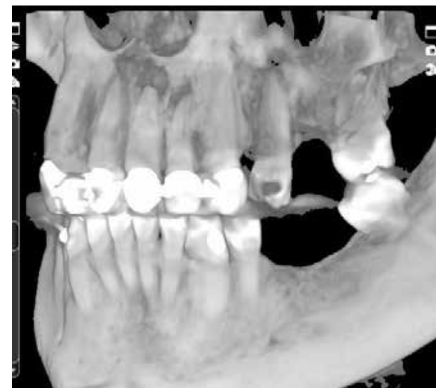
TIMING OF ENDODONTIC FAILURE

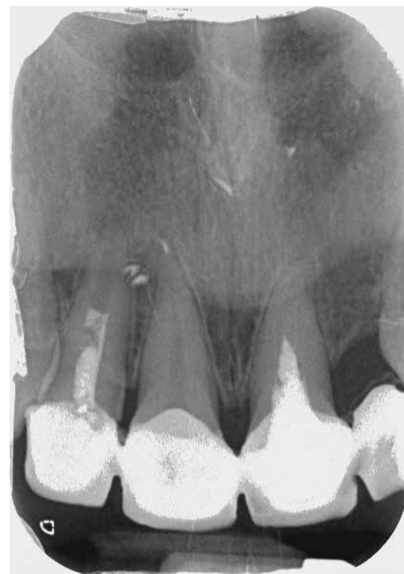
One must keep in mind the time required for the lesion to heal before deciding to intervene, if necessary (35).

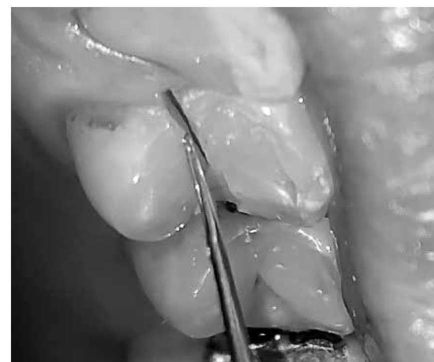
Friedman suggested that treatment should not be postponed or not offered in cases where there is radiographic evidence of disease because the patient has no symptoms (36).

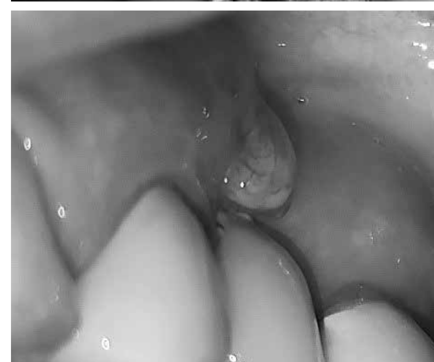
The six – month review should be kept for evaluation of symptoms. The two-year period is better for teeth in which endodontic treatment was carried out that had no periapical area present. Several authors quote two, four or more years might be required for a more holistic assessment of results of endodontic treatment, rather than the six-monthly and one year reviews only. Late failures are not commonly quoted in literature (35).

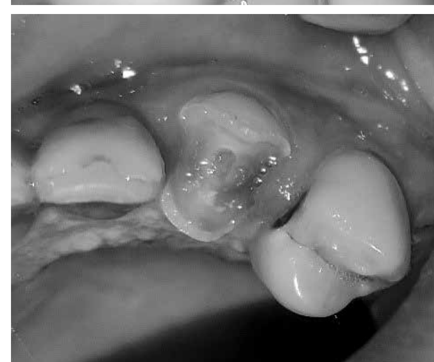












DIFFERENTIAL DIAGNOSIS OF ENDODONTIC FAILURE

The differential diagnosis of non-endodontic disease should be analysed before making the diagnosis of endodontic failure. In order to diagnose failure, one must go through the differential diagnosis before confirming the final decision (37).

The differential diagnosis of endodontic failures includes:

1. Perforation
2. Another tooth may be involved
3. Fracture
4. Trauma
5. Periodontal disease
6. Obturation
7. Overfilling of the roots
8. Missed anatomy

COMPLICATIONS IN REACHING A DIAGNOSIS OF FAILURE

Diagnosis of endodontic failure is often not an obvious decision. Most cases of endodontic failure are not simple diagnoses, especially in cases involving a periapical radiolucency. Despite advancements in technology of dental instrumentation and materials, endodontic failure is still happening (19). Once the diagnosis of endodontic failure is reached, the cause of failure must be established and corrected if possible through non-surgical methods initially (38).

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TAKING CARE OF OUR MENTAL WELLBEING DURING THE PANDEMIC

APS TALKS WEBINAR

Presented By Svetlana Gatt
Development And Communications Co-Ordinator, Richmond Foundation

Summarised by Dr David Muscat

The Richmond Foundation is a foundation that supports people experiencing mental health problems and those around them, throughout various aspects of life.

A poll was taken asking what the biggest challenge over the last 12 months was and the answer was 'worrying about someone vulnerable to the virus.'

Another poll asking what one has experienced-most people said 'anxious and worry.'

'What would you never like to hear again?' – majority said 'where is my mask?'

WHAT IS THE NEW NORMAL?

The unknown is often a cause of fear and distress and it can be overwhelming when human life is threatened.
We have had to learn how to remote learn. Work from home and our job description has changed since industries have been impacted by the pandemic.

In Malta some expatriates may have no support and no social structure. Physical distancing has impacted our relationships.

DEFINING MENTAL HEALTH

It refers to our cognitive ,emotional and behavioural well being . It affects how we think, feel, act.

It also helps determine how we handle stress, relate to others, make choices and work predicament.

How we respond to situations depends on our background, coping strategies, finances as well as familial and social support.

Periods of transition cause uncertainty. (eg. moving house, changing jobs).

When we look at mental health issues we look at change.

In extraordinary circumstances all reactions are normal. Not everyone will react in the same way to a pandemic. When basic things are uncertain we see a spike in anxiety. Our mental health is not static. Just like our physical health our mental well being fluctuates as it is affected by certain aspects.

In the course of life not all people will experience a mental illness, but everyone will struggle with a mental health problem.

At the beginning of the pandemic the foundation had an influx of calls-people are afraid of the unknown.

The health workers support them.

When we maintain a state of anxiety for too long it leads to fatigue.

There is pandemic fatigue. This results in low energy, loss of hope, loss of motivation, giving up and people are struggling to find hope.

It is a real experience. It does have a context. It makes sense.

'I don't know why I am feeling this way.'

Signs of fatigue:

1. decrease in overall health particularly in chronic conditions
2. Reduced ability to continue as usual
3. Increased conflict in relationships
4. Withdrawal and increase in loneliness
5. Increase in substance use- alcohol, cigarettes
6. Changes in sleep/eating patterns
7. Feeling hopeless and exhausted
8. Lack of motivation.

Continues on page 14.

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TAKING CARE OF OUR MENTAL WELLBEING DURING THE PANDEMIC

Continues from page 12.

ADJUSTING TO CHANGE

Getting used to adapting to change is not easy and it may cause distress and fear .The unprecedented challenges of the pandemic make it more important to care for our mental well being.

BE KIND

Use time for your hobbies. It is OK if you are just managing.

Set realistic goals which work for you. Change into your work clothes even if you are working online.

BALANCE

Indulge from time to time. Find a balance between what makes you happy now and what will make you happy in the long term.

Exercise for a few days

Sleep hygiene is a number of habits to help you get a good nights sleep.

Reduce caffeine intake

Do not use phone/screen before you sleep.

CONNECT

Important to stay connected. Avoid being isolated. We are lucky to be living in the digital age.

Play games together online.

Ask 'how are you really?' especially when someone is in quarantine.

Continues on page 16.

A Happy Ending to the Pandemic Exclusion

Following months of exchanges and negotiations with the Insurers of the DAM Professional Indemnity scheme, we are happy to announce that back in April we managed to amend the exclusion wording to the DAM's approval and satisfaction.

When COVID–19 broke out all insurers had applied a market exclusion on all insurance policies ranging from Professional Indemnity all the way down to Travel, Home & Motor Insurance. MIB have managed to negotiate a tailor-made exclusion wording for the DAM PI Scheme. The final agreed wording reads as follows:

General exclusion for pandemics:

This insurance excludes loss, damage, cost or expense caused by, resulting from, arising out of or related to, either directly or indirectly, or any action taken to hinder, defend against or respond to any Pandemic or fear or threat of a Pandemic, including but not limited to:

- *Coronavirus Disease (COVID–19); or*
- *Severe acute respiratory syndrome coronavirus 2 (SARS-CoV–2); or*
- *Any mutation or variation of SARS-CoV–2; or*
- *Pandemic as declared as such by the World Health Organization or any governmental authority.*

This exclusion applies regardless of any other cause or event that in any way contributes concurrently or in any sequence to the loss, damage, cost or expense.

The DAM Professional Indemnity Insurance Scheme is available exclusively through MIB.

Contact us for a no obligation quote.

Professional Indemnity Insurance

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TAKING CARE OF OUR MENTAL WELLBEING DURING THE PANDEMIC

Continues from page 14.

PUT BOUNDARIES

Work life and children at school and your home life merge into one.

Create pockets of certainty and agree with your partner to getting alone time during the day.

Set a time for lunch or for a short walk. After work. Eg 1pm is family lunch time.

An opportunity to do something together. Eg 6pm walk.

Limit your exposure to news and your own screen time. It can be demotivating to see things going badly. We tend to focus on the worst part of the news.

For those who struggle with worry , set a time of the day /structure for when you want to worry. If someone is struggling beyond self-coping the seek professional help.

The Richmond Foundation guides employers to take care of employees. There is an employee assistance programme.

The Richmond helpline is 1770.

This is 24/7.It also offers mental first aid and an online course. This is a mix of self taught module.

SLEEP HYGIENE

Rituals which work for you. Scents/lavender, chamomile. The brain associates with a trigger. Another thing is listening to a particular playlist of music.

One can download an app which picks up on a podcast which makes you sleep.

Meditation. Re-energising after a day. No screen time /phone before bed.

Remote living offers its challenges. It depends on age.

Loneliness exacerbates mental health issues-you can reach out to groups eg walk and talk, trekking groups.

PROFESSIONAL HELP

Certainly seek help if you struggle to go to work.

The aim of professional help is to have coping strategies in place.

If you know someone who needs help and is in denial be available for the person and listen.

It is important to trust that the person will be there.

One needs to seek help if the person is at risk of harm to themselves or to others. 'Better off if I am not here.'.

At the Richmond Foundation one may be anonymous. More information is only required if they are worried about you. On the phone are professionals with a background in psychology . They also offer a conversation/counselling room if you need more space. They can meet the person and see what he/she needs. There is also support for adolescents.

OBSESSIVE COMPULSIVE DISORDER

Intensive hand cleaning. Compulsive behaviour. You need to explain to a child. 'We are doing this because of the situation.'

Children adapt better than adults. They are resilient and bounce back.

'WORRY TIME'

Anxiety is harmful if it becomes excessive and takes over the rest of the day and shifts our thinking into risks and concerns. Find little things that one is good at and are grateful for to tip the balance. Find time to breathe and relax. Find strategies that work.

PAYMENT FORM

Please cut out this section and send with a cheque for 75 euro payable to **Dental Association of Malta** for your 2021 DAM membership – the best 75 euro investment ever!

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The Treasurer, Dr Noel Manche,
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Aesthetic results even on discoloured substructures

VALUE AND BRIGHTNESS CONTROL WITH THE IPS E.MAX SYSTEM

The correct brightness level is essential for the success of ceramic veneer restorations. This can be an issue, especially if discoloured preps are involved.

Dr Tony Rotondo
Brisbane/Australia

Szabolcs Hant
MDT, Perth/Australia

It is quite common for the prosthetic restorative team to be faced with discoloured preps, which, if located in the visible aesthetic zone, require a well-considered approach.

The question at the core is: How can we integrate the discoloured tooth structure into our layering work in a way that a balance between an effective "coverage" and a vibrant interplay of shades is achieved (Figs 1 and 2)? The approach outlined below is based on a clearly defined treatment itinerary consisting of the following stages:

1. Space requirement for masking with all-ceramic restorations
2. Material selection
3. Masking with framework
4. Masking with staining material (IPS Ivocolor®)
5. Layering with ceramic materials (IPS e.max® Ceram)

Fig. 1: To replicate the dentition in this case, Power Dentin is used for the opaque area and Dentin for the more translucent part.

Fig. 2 (Below): These images highlight the inherent structure of natural teeth. It is the job of the dental technician to replicate these characteristics.

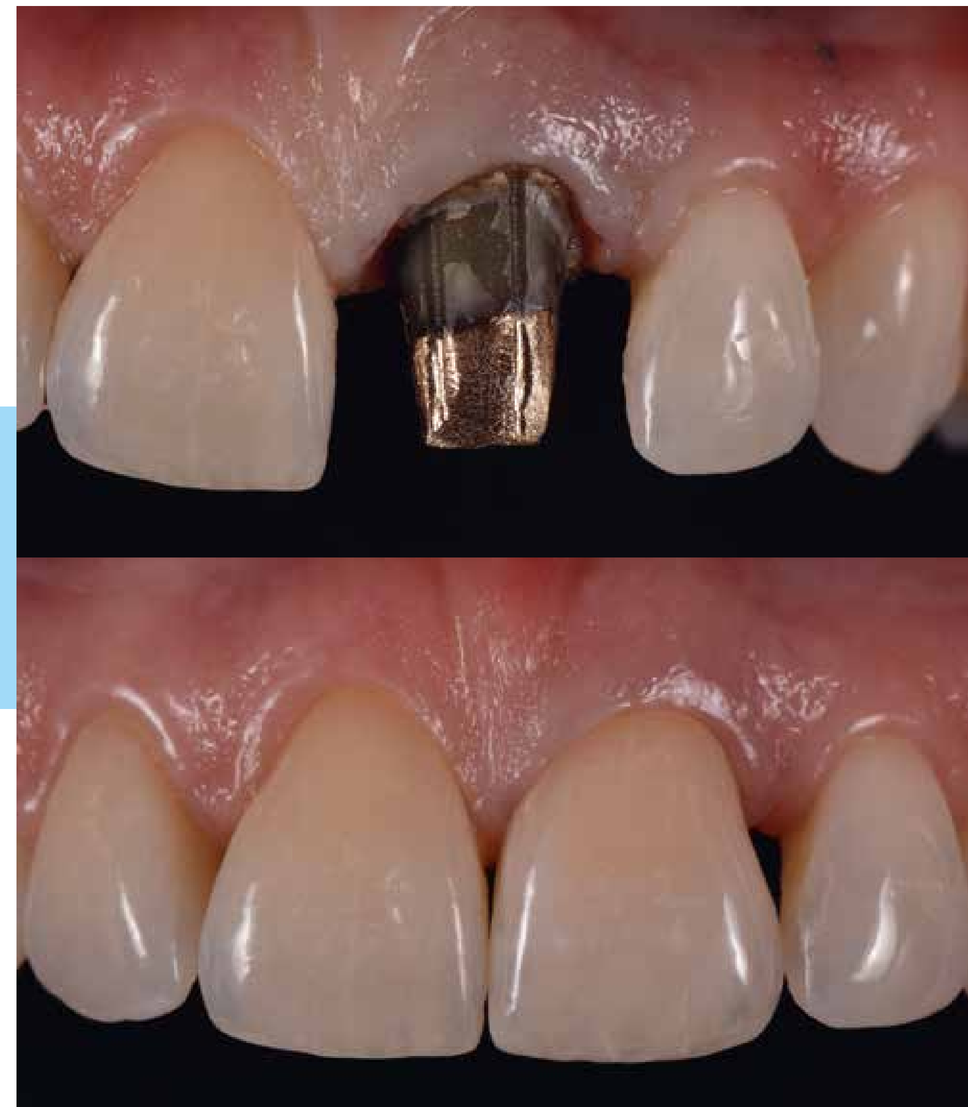

Fig. 3 (Above, left): The metal core build-up is to be restored with a crown.

Fig. 4 (Above): The coping is first masked with one layer, in total with three layers, of IPS Ivocolor Essence White. Available space: 1.1mm.

Fig. 5 (Left): The metal post is effectively masked. The brightness and value of the crown blends in with the natural dentition optimally.

1. SPACE REQUIREMENTS FOR MASKING DISCOLOURED SUBSTRATES WITH ALL-CERAMIC RESTORATIONS

Sufficient space is essential to place all-ceramic restorations on discoloured preps if we want to mask the discolouration and attain a natural shade effect and the desired brightness (Figs 3 to 5).

We can calculate the space required for the all-ceramic restoration with a formula proposed by Aki Yoshida and Galip Gürel as follows: We take the minimum thickness of an all-ceramic framework and add 0.15 mm by every shade we want to increase the brightness.

For example:

- Discoloured prep: shade A4
- Goal for the final crown: A1
- Minimum thickness of IPS e.max Press: 0.4 mm
- Space required for the restoration: 4 x 0.15 + 0.4 = 1 mm

Another method is to use the SNA app (IPS e.max Shade Navigation App). This app establishes the translucency and shade based on the starting situation.

2. SELECTING THE FRAMEWORK MATERIAL

Our material of choice has been IPS e.max Press for the past twelve years and we have had excellent experiences with it. We usually use the MO 0, LT and MT press ingots. If we happen to use the LT ingot, we always select an ingot that is one shade brighter for the framework, for example a BL4 for a final A1 shade. This is discussed in more detail in the section on "Layering" below. Under normal circumstances,

these ingots are ideal. However, if the prep is severely discoloured, the situation is more complicated. In these cases, the discoloured tooth structure must be disguised.

We differentiate between two methods for masking:

- Masking with the framework
- Masking with staining material (IPS Ivocolor)

3. MASKING WITH FRAMEWORK

If the framework is used to mask the discoloured tooth structure, the options are limited. The masking capabilities will depend on the thickness of the framework and not only on the material chosen.

MO ingots can easily block out discoloured substrates if they are used in an adequate thickness of 0.5 to 0.7 mm. In many cases, however, there is not enough space or the shade of the prep is too dark. Another method is to use HO ingots or zirconia frameworks for masking.

Continues on page 20.

Aesthetic results even on discoloured substructures

VALUE AND BRIGHTNESS CONTROL WITH THE IPS E.MAX SYSTEM

Continues from page 19.

However, these materials are extremely opaque, making it hard to create a natural illusion of depth and translucency in the incisal area.

4. MASKING WITH STAINING MATERIAL (IPS IVOCOLOR)

The Ivocolor range of stains and glazes includes some amazing materials. Given their unique properties, the Enamel and Effect materials are suitable for both metal-ceramic and all-ceramic restorations.

Another advantage we like is the low firing temperature. The low-fusing Glaze and Essence materials helped us many times to adjust a contact point or to add more chroma and effects at the correction firing, without compromising the shape or texture.

We need a framework to use this technique. Any framework material will do in conjunction with the IPS Ivocolor range.

Initially, we always used the MO 0 ingots. Then we realized that the LT and MT ingots generate similar masking effects, whilst providing superb full-contour lingual surfaces. IPS Ivocolor Essence White can be easily used as a basic white stain (Figs 6 to 9).

We fire three separate layers because one thick layer can shrink too much during the firing process, causing uneven surfaces and cracks from the shrinking. With three layers of IPS Ivocolor Essence White, even severely discoloured areas can be masked without reducing the space required for the layering.

These three layers of staining material are usually only between 0.1 and 0.15 mm thick. Other Essences can be added to the basic white stain to achieve an even closer match to the final shade. In so doing, however, you should bear in mind that the more translucent materials you mix in, the less effective the masking effect is.

For example, IPS Ivocolor Essence Cream contains translucent particles that reduce the opacity of the mixture. If you are not sure about the level of opacity you are getting, you can dilute the mixture with stain liquid or benzyl alcohol and then check with a magnifying glass (10 to 20-times magnification).

We normally use IPS Ivocolor Essence Sunset to add chroma to the white stain. Alternatively, you can also just use pure white at this stage and increase the chroma at the next stains firing. Stains are fired at a firing temperature of 750°C using the dentin firing program.

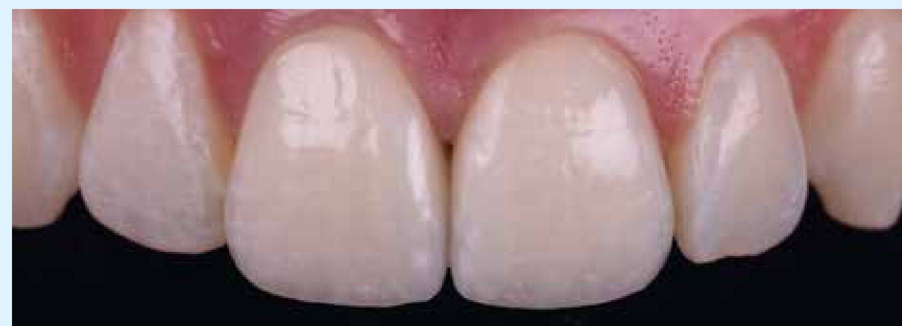

Fig. 6 (Top row, left): This case also involves a severely discoloured prep.

Fig. 7 (Top row, right): LT framework masked with IPS Ivocolor Essence White.

Fig. 8 (Bottom row, left): A photograph (polarizing filter) is taken at the tryin to verify the brightness.

Fig. 9 (Bottom row, right): Both crowns in situ.

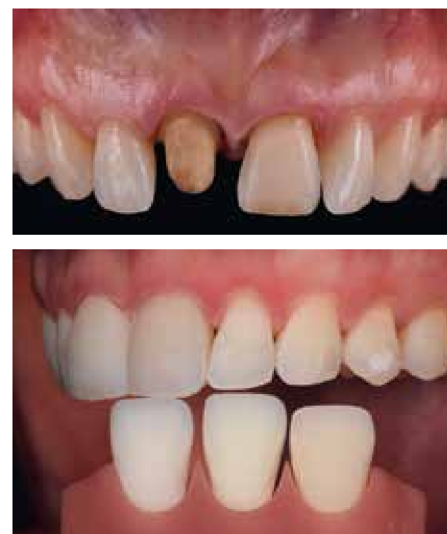

Fig. 10 (Top left): In this case, the discoloured prep is to be restored with a crown and the adjacent tooth with a veneer.
Figs. 11a (Above) and 11b (Above, right): Dental photographs assist in analysing the initial situation.

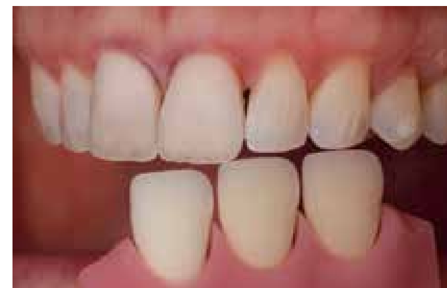

Fig. 12 (Top left): The frameworks have been pressed from a MT ingot and masked with IPS Ivocolor Essence White.
Fig. 13 (Above): Tryin after the first firing. Fig. 14 (Above, right): Both ceramic restorations in situ.

5. LAYERING WITH IPS E.MAX CERAM

Layering is also an important factor to cover discoloured preps and to achieve a high level of brightness and chroma.

Originally, the IPS e.max layering ceramic was developed for opaque, high value framework materials, such as the HO and MO ingots and the first generation of zirconia materials. On these high-value frameworks, IPS e.max Ceram worked beautifully.

Problems started to arise when the LT and HT ingots were introduced. How could you combine the translucent IPS e.max Ceram layering ceramic with the trans- lucent LT and HT framework materials?

All of a sudden, the usual layering technique did not work any longer, leaving dental technicians confused and frustrated – and so were we.

Then we discovered the key element for successful restorations: brightness-value-opacity. We learned a great deal by experimenting with different combinations of materials. For some time, our principle has always been to use Mamelon Light Impulse – a material that features a high level of opacity and fluorescence and goes a long way towards achieving a lifelike result.

In the meantime, the IPS e.max Ceram system has been extended to include the new Power Dentin and Power Incisal range of materials.

These materials allow users to achieve a natural opacity without mixing different materials. If the framework is white and/ or opaque, the first generation of Deep Dentin/Dentin/ Incisal materials can still be used.

If the frameworks are made of LT, MT or other translucent material, the new Power materials are used best (Figs 10 to 14).

CONCLUSION

The correct brightness is essential for successful esthetic re- sults. The framework material should be selected carefully, especially for all-ceramic restorations. With the IPS e.max system, this is relatively easy, even in difficult cases. It is advisable to first determine the shade of the preparation and the space available for the restoration and then select the framework material.

The IPS e.max Shade Navigation app (SNA app) is a useful tool for dentists and dental technicians in doing this. With the above presented approach, we can restore most cases of severely discoloured tooth structure with ceramic restorations that harmoniously and smoothly blend in with the natural dentition.

WHAT MEDICAL PROFESSIONALS NEED TO KNOW ABOUT THE COVID-19 VACCINE

ONLINE PRESENTATIONS ON 6/01/2021 FOR MEDICAL PROFESSIONALS

Chaired by Dr Chris Barbara. Summarised by Dr David Muscat.

VIROLOGY OF COVID 19 BY DR CHRIS BARBARA

There are 7 human COV's presenting in the alpha and beta Coronavirus genera.SARS,COV1, MERS, SArsCOV2 are likely to have all emerged from bats and were transferred to human via an intermediate host.

More than 500 COVs have been identified in bats in china, with estimates of unknown bat COV diversity reaching over 5000.

The SARS epidemic ended and the MERS has still infections incidence.

There is a very log RNA strand so there are many chances of mutations. It is enclosed in a nucleocapsid and an envelope. The spike glycoproteins on the outside attach to the host cell and it is the spike that is being produced in vaccines.

There are also membranes proteins.

The virus enters the cell (in the eyelid, nasal cavity , oral cavity) through the ACE2 protein, receptor in the host cell. There is ssRNA , to robosome ,to protein shell which replicates . A positive strand of RNA is produced, which goes to the golgi body and is then released by exocytosis and infects man.

The spike protein docks onto the AC2 receptors, then cut by the cellular TMPRss2 protease (molecular scissors).

The COV 2 entry is driven by the interaction between the spike and angiotensin converting enzyme 2 (ACE2) subsequent proteases cleavage drives fusion.

SARS COV 2 infects T lymphocytes through its spike protein.

The UK variant is the 501V1. It is the N501Y variation and has a 69-70 deletion . P681H.

The latter makes the virus more aggressive and also more aggressive symptoms. The NS01Y has manifested itself in South Africa.

THE COVID 19 VACCINE BY DR CHARLES MALLIA AZZOPARDI

The vaccine was developed in less than 12 months. Usually there si a period of exploration with pre clinical and clinical trials which can take 10-15 years overall.

The exploratory and preclinical trials were not done. There was a lot of financial help so there were no financial issues.

The pandemic produced many infections which were contracted within the time period of the studies.

Regarding the approval process the regulatory bodies were receiving data as it was collected as this was a parallel process. The agency had access to the data.

Re manufacturing there was a risk taken by the company but they had enough Goverment money to take the risk so they produced the vaccine before they received the approval.

The regulatory bodies gave the go ahead as it was safe and effective. They rolled out the vaccine that was stored in their stores.

The safety bar of vaccines is always expected to be higher than of medicines and vaccines are given to healthy people.

POST VACCINE IMMUNE LONGEVITY AND VACCINE HYPERSENSITIVITY BY DR KEITH SACCO, CLINICAL IMMUNOLOGIST USA

The immune system protect from infection and cancers.

The is an INATE arm (macrophages, dendritic cells eosinophils, NK cells) no memory or specificity

And an ADAPTIVE ARM(cd4 AND cd8 t CELLS , b CELLS) memory and specificity.

Some RNA viruses use reverse transcription.

There is a clonal selection in adaptive immune system Helper T cells effector T cells,memory T cells. B cells -bone marrow.

The first few days of life -millions of specific T cells and B cells are produced. The receptor recognises the sequences in the spike protein. They are naive to this antigen. T cells only recognise peptides. B cells recognize everything else. Messenger RNA does not cause allergies as it does not react with T cells.

Vaccines also have excipients. The spike antigen is shared among the major vaccine.

Pfizer -Biontech ,Moderna -lipid nanoparticle s surrounding the spike protein. This is injected into the deltoid muscle.

The Spike protein- the antigen enters a dendritic cell . The activated dendritic cell presents the antigen MHC11 to a naive CD4 or CD5 in the lymph node so you get adenopathy.

If there are mutations AA changes eg hydrophobic AA to another can affect affinity. A variant changes one or two amino acids out of nine. It is unlikely that a vaccine will be rendered ineffective.

The CD4 cell is the 'master general'. The CD8 is 'special forces.' They talk to the dendritic cell. The CD8 T cell becomes a memory cell . A number of CD4 cells are activated leading to a clonal expansion. It directs T cell repertoire.

A naive CD4 and T cells will set off IL-12, IL-4, IL-1 IL-10 etc TH 1,2,17 go onto IFN-Y, IL-4,IL-10, IL17, IL22

For a high IgG affinity you need tow doses of the vaccine.

Component of memory- TH1 skewed CD4 'helper ' cells. CD8 effective memory cytotoxic T cell -long lived.

Current vaccine authorities -all 3 producing neutralising antibodies.

This process takes time so social distancing is still important to maintain. One would expect a positive titre within 6-8 weeks .

SARS COV 2 is lethal as it activates a lot of T cells A cytokine storm. There is also a genetic reason.

In the elderly there may be immune exhaustion (overwhelmed). Excess antigen load promotes immune exhaustion early on.

It is important to note that with mask the amount of titre antigen has decreased. Masks are a reason for a lesser mortality.

Autoinflammation- autoimmunity on one hand and hypersensitivity on the other.

Vaccine reaction- immediate -IgE.non IgE,

Delayed-site reaction .

The patient needs to be observed for 15 minutes, as there is a risk of anaphylaxis.

It may be to the excipients- polysorbate or poly ethylene glycol. It will probably not be an issue.

MEDICAL ADVISOR OF PFIZER BASED IN GREECE: DR MARIOS DETSIS

Recent mutations to the virus have been followed closely and data has been collected. The 162b2 targets the full spike protein . The mutation was P2.

M RNA vaccines elicits both neutralising antibody and cellular immune response to the spike antigen.

There has been a clinical developmental programme . A study of over 9000 patients who were 65 years and older and of these 20.9%.were over 75 years old.

The study was balanced regarding sex, age, ethnicity.

With pregnancy one has to weigh the patients benefit versus risks.

Regarding breast feeding there is no data regarding as to whether it is expressed in milk.

There seem to be no harmful effects regarding fertility. The reaction is less common with the second dose.

COVID 19 VACCINES SEMINAR BY THE DEPARTMENT OF PHARMACY

IN COLLABORATION WITH THE MALTA MEDICINES AUTHORITY

Chaired by Prof. Serracino Inglott. Written up by Dr David Muscat.

PROFESSOR SERRACINO INGLOTT

The mRNA vaccine has been produced faster than conventional protein vaccines.

The instability of mRNA is mostly due to enzymatic degradation by mRNAses.

It is embedded in lipid nanoprotein for protein . This protects the mRNA from degradation. Allows for an efficient delivery of mRNA and has a high reproducibility and is easy to scale up.

The mRNA vaccine-scientists focus on the genetic sequence for the virus 'spike' protein. This is used to synthesise an mRNA sequence-instructions that cells can use to make the 'spike protein.

The synthetic mRNA is packaged in a lipid nanoparticle that delivers the instructions to a cell.

One inside the cell, its cellular machinery follows the mRNA instructions to produce the viral protein. This is displayed on the surface of the cell and stimulates an immune response.

The administration of the vaccine-intramuscaular. There is a limited injection volume (1-3mls in an adult)and dense blood networks.

PROPERTIES OF MRNAVACCINES

The immune response involves B cells and T cells. There are no live components so there is no risk of the vaccine triggering disease. They are easy to manufacture. Some need ultra cold storage. They have never been licensed in humans and a booster shot may be required.

MRNA PFIZER/BIONTECH

Multidose vial to be diluted before use. 1 dose 30m micrograms of RNA embedded in lipid nanoparticles 0.3ml.

Excipients; polyethylene glycol/ macrogel(PEG),cholesterol, potassium chloride, potassium dihydrogen phosphate, sodium chloride, disodium hydrogen phosphate dehydrate, sucrose. Store at -80 degrees to -60 degrees.

THE EFFECTIVENESS OF THE VACCINE

Dispensing:

1. Thawing . no more than 2 hours at room temperature.
2. Before dilution invert / do not shake
3. Dilution
4. Gently invert 10 times to mix/do not shake

The vial contains a fill volume of 0.45 mls. The volume must be diluted with 1.8mls of 0.9%.Sterile sodium chloride injection. Record date.

One must NOT shake it as you will destroy the lipid coating.

Do NOT shake it in transport from the place it is prepared to the place used.

Has the dilution been done properly? Have we taken the full amount? Low -dead space syringes can be used to extract up to six doses from a single vial.

If standard syringes and needle are used these may not be sufficient to extract a 6th dose from a single vial. So it is important to use low dead space syringes and/or needles.

MRNA VACCINE MODERNA

A multidose vial (10) one dose 100 micrograms of RNA embedded in lipid nanoparticles0.5mls strength 0.2mg/ml.

Excipients; PEG,cholesterol,DSPC, tromethanine, acetic acid and sucrose.

Store at -25 degrees to -15 degrees. There is a slight difference in the coating material of mRNA.

OXFORD ASTRA /ZENECA

Viral vector vaccine ,Use a modified virus to deliver the genetic code for the Covid19 spike protein .into the human cell.

When inserted into human cells, instructions to make large amounts of antigen which the trigger an immune response by T lymphocytes and B lymphocytes.

The major bottleneck in manufacture is a complex process to assemble the vaccine. It is more time consuming to scale up with the vaccine .

The advantages of viral vector are that they are more stable . There is a well established technology. A strong immune response is elicited.

The immune response involves B cells and T cells.

Disadvantages are that previous exposure to the vector could reduce effectiveness. Relatively complex to manufacture.

Regulatory review of Oxfors / Astra Zeneca Covid 19 vaccine- a pooled analysis of internal clinical data for ongoing clinical trials in US, Brazil and S Africa.

There would be differences when trials are in different countries eg. side effects reported in UK may be higher than in Brazil.

Was something wrong in the trial? There was an investigate plan for children. Robust risk management. Clear legal framework.

NOVOTAX is a protein sub unit- a harvested spike protein. And assembled into nanoparticles.

There are 3 clinical trials planned in UK, S Africa, US and Mexico.

It is stable and complex to manufacture. Well established technology.

Needs adjuvants to booster. Store at 2-8 degrees. Determining the best antigen takes time.

PROFESSOR NEVILLE CALLEJA

It is important that the second vaccine has to be taken with the same brand.

PROFESSOR JOHN JOSEPH BORG

A conditioned marketing authorisation requires the full documentation as requested by annex 1 of directive 2001/83/EC.

Specific objectives to the authorisation have to be fulfilled.

Special warnings-anxiety related reactions including syncope/hyperventilation or stress. Anaphylactic shock.

PROFESSOR MARK BRINCAT

The closer you are to the site of action the less likely you are to have side effects. The mRNA is right inside .Probing the necessary protein. The spike proteins being produced but mRNA preferred.

The virus vectors are interesting as they are stable and proven to be the vaccines of the world

Astra Zeneca has teamed up with Sputnik 5 and the former is a reputable company so this is a good vaccine.

COVID 19 VACCINES: TRUTHS, MYTHS AND MISCONCEPTIONS

Organised By CME30. Chaired by Dr Wilfred Galea on 1/04/2021.

With presentations by:

Mr Steve Agius, Chief Operating Officer at Mater Dei, Co-Ordinator of Vaccination Programme

and Professor Michael Borg, Head Of Infection Control Department at Mater Dei Hospital.

Summarised By Dr David Muscat.

MR STEVE AGIUS

The Vaccination programme in Malta started on 27/12/2020. Today we have exceeded 200 K doses including the first and second doses.

The roll-out methodology takes into consideration the stocks.Covid 19 vaccines come in chunks every week. Sometimes quantities change.

The benefits of this include minimisation of 'out of stock' risk. In addition one ensures one has the best brands available.

So far the 80-84 year olds have all been vaccinated. Currently the over 70s are being vaccinated. There will shortly be 40K invitations to the over 60s.

145K have received the first dose. In all 34% of those eligible for the Covid19 vaccine have received it.

Israel and the UK both have a robust digital health system so they were successful in rolling out the vaccination programme.

PROFESSOR MICHAEL BORG

None of the vaccines that have been licences by the European Medicines Agency are the attenuated variety. The only ones available are the Chinese ones (Sinopharm) which have been bought by Hungary and Czechia.

Pfizer /BioNtech and Moderna deliver mRNA directly into ribosomes. They have to be kept at very low temperatures and have to be used within 6 hours of defrosting.

Astra Zeneca and Johnson and Johnson produce mRNA in the host nucleus after delivery of DNA in a non-replicating non-pathogenic vector.

These are most robust and can be kept in the fridge. They are derived from a chimpanzee adenovirus..

Pfizer has an efficacy of 95% with a confidence interval of 89-96%.

Moderna has an efficacy of 94% with a confidence interval of 86%.

With Astra Zeneca it was found to have a better efficacy with a longer interval between the first and second doses. This was 82% with a 12 week interval . This had a 96% confidence interval.

A Confidence Interval in statistics is a range of vales that is determined through use of observed data, calculated at a desired confidence level ,that may contain the true value of the parameter being studied.

ALLERGIES

Only indications for Mater Dei vaccine sessions are a definite history of anaphylaxis ,unconsciousness and/or angioedema with sever breathing difficulties.

The session requires a CPR nurse present at all times and an anaesthetist on immediate call (within five minutes).

Few other countries offer this service.

For those with mild/moderate allergy -at hub-stay for 30 minutes after the vaccination.

PATIENTS AT RISK OF THROMBOEMBOLISM

Disseminated intravascular coagulation and CVST in combination with thrombocytopenia -25 cases as of 16 March out of 20 million people in the EU.

In the UK, 11 were vaccinated and there were only 3 cases.

Vaccines of Astra Zeneca were mainly given to over 55s so it is no surprise that this occurred in this age group.

A causal link with the vaccine is not proven, but it is possible but not proven.

Available data do not suggest any overall increase in conditions such as DVT or pulmonary embolism following Covid 19 vaccines.

Thrombocytopenia occurred also with vaccines other than the Astra Zeneca.

European medicines agency says that the efficacy of the vaccine outweighs the small likelihood of disseminated intravascular coagulation or cerebral venous sinus thrombosis.

One must inform healthcare professionals in case of severe or worsening headache, blurred vision, fainting, loss of consciousness, loss of control over movement of parts of the body, seizures, rash or bleeding disorders.

The logistical campaign is the biggest in Malta since WW2. Covid 19 is killing people so there is a need to vaccinate.

Malta's population tends to mobilise in a crisis.

Malta's vaccination coverage is three times better than most of the EU. The uptake amongst 85 year olds has been excellent.

The UK vaccination programme is second only to Israel. There are no indications for slowing down the Astra Zeneca immunisations in Malta.

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Moisturizes the oral cavity
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THE RISE OF 4D DYNAMIC ALIGNERS

Pending patents by K LINE EUROPE

MOBILE APP
For a seamless treatment journey and reliable patient monitoring, the mobile app is a great companion throughout the treatment and even after

ALIGNER BOOSTER
Boosts the aligner by activating shape-shifting to the next aligner shape in sequence instead of wearing a new aligner

SMART ALIGNER
Made of unique shape memory polymers capable of retaining 3 different shapes to substitute 3 aligners

3 SHAPES | 3 WEEKS | 1 ALIGNER

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BLOOD GLUCOSE SELF-MONITORING

THE ROLE OF MANAGEMENT IN DIABETES

A webinar chaired Dr Wilfred Galea and presented by Prof. Stephen Fava, Consultant in General Medicine, Diabetes and Endocrinology, Chairman of The Department Of Medicine, Mater Dei with the session supported by Vivian Commercial Ltd.

Summarised By Dr David Muscat.

A tight control of blood sugar leads to a control of diabetes and a better quality of life.

There are evolving diabetes technologies. Although there are not many studies there is evidence in favour of self monitoring . The Cochrane review showed that with structured self monitoring there is a lower A1C.over six months to one year.

(Cochrane is a British international charitable organisation formed to organise medical research findings to facilitate evidence based choices about health interventions involving health professionals, patients and policy makers.)

The A1C test is a common blood test used to diagnose type 1 and type 2 diabetes. It is also used to monitor the management of blood glucose levels . The A1C test measures what percentage of haemoglobin proteins in the blood are glycated. (coated with sugar).

The higher the level of A1C the poorer the blood sugar control and the higher the risk of diabetic complications. Self monitoring improves the outcome. Patients who self monitor are probably more health conscious and are careful with their diet. A lower A1C will also result in better cardiovascular system etc..

An increase in blood glucose may also result in retinopathy. It is important that patients do not take their blood glucose always at the same time. This is a form of habit by old patients.. It does not reflect the true .blood glucose over 24 hours. . Blood glucose varies diurnally , with meals(pre and post prandial), exercise ,biological factors and due to issues affecting the GI tract.

At night the blood glucose rises. As our metabolic rate goes down at night ,so does glucose metabolism . There is also an increase in growth hormone secretion as well as cortisol. Thus due to the' dawn phenomenon' blood glucose is raised in the morning. There is also the 'end of dose effect' of the last dose of insulin.

Plasma glucose will be higher than blood glucose due to the gradient.

THE ACCU CHECK

One needs to have the venous plasma equivalent. There is also an app for continuous blood monitoring. One is blind and one is in real time. The ACCU Check machine gives that. One also needs less blood than was need previously. The ACCU Check has a spill resistant test strip container and has proven accuracy. It is a smart pack. One only needs 0.06 mls of blood. The strip also caters for differences in temperature and humidity. The Accu Check guide is linked to MY SUGAR APP

The results are uploaded onto the app. The patient will be guided on carbohydrate counting function and the results can be extrapolated onto a pdf or excel so the report can be presented to the consultant.

The QR code can be downloaded using IOS or Android. The app is patient friendly, It explains the insulin correction factor and calculates everything automatically . If the insulin /carbohydrate ratio varies throughout the day it can also be inputted into the system .

Insulin is a unique drug. It is a no ceiling drug. One may keep increasing the dose according to need. There is infinite variability.

If one has a glucose level of12 one needs to factor in a corrective dose to get it down to 6 . One must also consider how much carbohydrate is going to be eaten so one wil need more insulin.

Type 2 diabetics are not on insulin but self monitoring still plays a role.

Dietary patterns of patients need to be adapted. Eg do not eat a large meal at night. Eat frequently throughout the day..

EDITORS NOTE

In the Sunday Times 7th March 2021 the President of the Maltese Diabetic Association, Chris Delicata welcomed the Goverment's introduction of Continuous Glucose Monitoring (CGM) devices , free of charge for children and adolescents under 16 and living with type 1 diabetes. The CGM's are part of a wider remote monitoring system whereby results will be monitored on a 24/7 basis by the patient, parents and/ or guardians as well as healthcare professionals through a dedicated monitoring unit at Mater Dei Hospital. The Association urged the government to introduce such devices for all persons living with type 1 diabetes.

PHARMACOVIGILANCE IN THE TIME OF A PANDEMIC

ADVERSE DRUG REACTION REPORTING

Educational webinar held virtually on 22/02/2021 by Elisa Curtolo, a Doctorate Of Pharmacy student, under the auspices of the Department of Pharmacy.

Summarised By Dr David Muscat.

The presentation was introduced by Professor Serracino Inglott and Dr Deo Debattista. Dr Serracino Inglott said that an exceptional effort must be made for vigilance since the Covid 19 vaccine was produced so rapidly.

Dr Deo Debattista said that during his working life as a doctor several drugs were withdrawn such as Thalidomide and Chloramphenicol.

Quinolone for example also has effects on tendonitis and Achilles tendon rupture .

PRESENTATION

Maltese legislation: 'It shall be the duty of doctors and other health professionals to immediately report to the Authority any suspected adverse reaction to a medicinal product in Malta.'

Adverse Drug reactions cause morbidity and mortality. They account for 3.5% of median hospital admissions and 10.1% during hospitalisation .Adverse drug reactions cause 197,000 deaths in Europe annually.

Adverse drug reactions may cause disabilities as well as congenital abnormalities and birth defects. Spontaneous reporting is voluntary but only 1-10% of serious adverse drug reactions are reported.,

BARRIER TO ADR REPORTING BY PROFESSIONALS

1. The difficulty to understand if an ADR actually occurred.
2. Time
3. ADR already well documented to occur
4. Patient followed by different professionals

SPONTANEOUS REPORTING OF COVID 19 IN MALTA

Vaccinations started to be rolled out on 27/12 2020.

There were 24 ADR's 23 were reported by health care professionals and one was reported by the patient.% were serious and involved allergies, wheezing high fever.

Of these five two recovered, two are recovering and one in monitored as continued with symptoms.

There are 24 adverse drug reactions which include tiredness, pain at injection site, fever, facial paralysis , body aches .

HOW TO FILL IN THE ADR REPORTING FORM

There are 4 criteria
1. identifiable patient
2. suspected medicinal product
3. Suspected ADR
4. Identifiable reporter

DETAILS WHICH FACILITATE EVALUATION

- ADR start/stop date
- Suspected drug start/stop date
- Indication of the suspected drug
- Patient outcome and seriousness
- Rechallenge and dechallenge
- Patient details -past medical history, concomitant drugs
- Laboratory data

QUALITY OF REPORTS

Good qualitydata will result in a better cause assessment and an appropriate and timely regulatory action.

The form may be filled by a health care professional or the patient and sent by post to:

Malta Medicines Authority
Sir Temi Zammit buildings
Malta Life sunrise Park
San Gwann
SGN 3000

Or by email to *postlicensing.medicinesauthority@gov.mt*

Or by post or e mail to the Marketing authorisation holder of that product. Details are to be found on the PIL inside every box.

To report an ADR you do not have to be certain that it was the product but that there is a reasonable causal relationship.

They should all be reported It is the duty of the doctor or the health care professional to report the ADR.

One may report the ADR on the MMA website (Malta Medicines Authority).

There must be four minimum criteria to report an ADR, .One must mention the manufacturer, the Brand name and batch number.

The side effects must be described and details about the reporter must be filled in .
One must look at other information such as allergy. Was the drug reaction due to a medication error ,eg incorrect dosage

The better the quality of details provided the better the action that may be taken.

One may download the form from the MMA fill in and post or e mail
One may also contact the marketing authorisation holder by post or e mail.

THE FORM

There is first a decision tree:

- Are you reporting an ADR ?
- Are you reporting an ADR due to a medication error or other causative events such as occupational exposure ,drug abuse or overdose?
- Are you reporting a medication error or other causative events that did not lead to an ADR?

SECTION 1

Enter:

1. Sex, DOB, age – identify patient
2. Suspected medicine, brand name , batch
3. 3 details about the side effects
4. Details about the reporter
5. List other medications being taken. How serious is the ADR? Do you know the outcome ? A follow up may be necessary. Was the medication stopped?Was treatment required to stop the ADR?
6. Was the ADR caused by a medicinal error or not? Is this the first time you reported an ADR?

SECTION 2

Medication error reporting. Location. Suspected causes. When it happened. Any factor that contributed towards the medication error. Was it preventable? Any action taken

SECTION 3

Reporter details eg. doctor, dentist ,pharmacist and date of report. A follow up may be indicated.

THE CLEAR CORRECT WEBINARS

Presented by Dr Raul Serrano.

Summarised By Dr David Muscat.

FACTORS TO CONSIDER BEFORE EMBARKING UPON A CASE OF ALIGNERS

One needs to look at Tipping, translation, proclination (more than one tooth together) as well as expansion.

Expansion may be skeletal or dental. With skeletal one may use a palatal suture expander.

Expansion creates arch space.

Distalisation – moving a tooth away from the sagittal plane, following a curvature of the dental arch , usually with translation.

A good starter case is around 2mm or less.

Mesialisation – moving a tooth nearer to the midline or the most anterior part of the dental arch A good case is about 1mm.or less.

Intrusion – pushing a tooth gingivally towards its periodontal housing. A good case is about 0.5mm.or less. This is a difficult procedure.

Extrusion – The overeruption or migration of a tooth beyond its normal occlusal position.

A good starter case is 0.5mm or less posterior and 1mm or less anterior. One may use elastics.

Tenets of extrusion:

1. A tipped tooth will not extrude easily
2. Place a horizontal engager
3. Upright tooth first
4. Be sure there is adequate MD space. (otherwise there will be interference)
5. Use IPR when needed (interproximal reduction)
6. Then extrude slowly, using elastics if necessary.

UNDERSTANDING CASE SELECTION AND PATIENT EVALUATION

ORTHODONTIC EXAM

- Informed consent important.
- Angles classification
- Overbite/overjet
- Midline
- Buccal segments
- Posterior segments
- Black triangles
- Skeletal transverse problems.

FUNCTIONAL OCCLUSION
Canine guidance, canine protected occlusion, group function.

Group function-heavier loads should ideally be near the most anterior teeth and lighter loads near the posterior teeth.

Midliine, Frontal View, Vertical relationship.

Continues on page 32.

THE CLEAR CORRECT WEBINARS

Continues from page 31.

The lower third is important.

Lip relation. Incisors at rest, Do incisors show on smiling.

Lips- competent or incompetent.

Smile arch,symmetry,esthetics. Profile view.

Vertical relationship-reduced angle, average angle, increased angle

Make the lower 1/3 as close as possible to the middle1/3.

Antero-posterior relationship – concave, orthognathic, convex.

TMJ evaluation –clicking ,crepitus, pain locking or limited opening – One needs to Advise a patient accordingly before starting if there are problems with TMJ.

CASE COMPLEXITY

- Consider patients physical condition
- Dentists treatment goals
- Level of training

CASES

1. PREDICTABLE

10 stages or less. Eg small spaces to close (1to 3 mm)

Minor overlaps, little rotation, anterior crossbite (one tooth).

2. MODERATE

10—20 stages

Spaces to close or optimize
Less than 5 mm of crowding
Habits-lip sucking, nail biting, tongue thrusting

3. DIFFICULT

20 aligners or more. Greater than 20 stages. Multiple missing teeth. Extreme crowding. Posterior crossbite, skeletal imbalance, unerupted teeth. Severe rotation.

Take photos, X rays models.

Submit:

1. INFORMED CONSENT AND Legal AGREEMENT . Issues may arise. Potential risks.

2. PRESCRIPTION INFORMATION .Proper instructions how you want dental movements.

3. Intraoral clinical photos. X rays optional but recommended.

4. Be precise and clear. Avoid vague instructions.

5. Example of a good instruction 'add 5 degrees of mesial root tip to 22. Intrude lower anterior teeth using position of 41 as reference point.'

6. Photos. 8 photos in all. Three extraoral , Full face a)not smiling .b)smiling c) profile. Then lateral views Left and right . A frontal. Upper and lower occlusal views. Patient must be in the right position. Patient must be at 90 degrees to the angle of the chair.

7. With the extraoral photos patient must be in the dental chair and one must use cheek retractors. For profile turn the patient to the left. Eyes must be horizontal and the patient must look ahead.

8. Seperate the cheeks and the soft tissues with the cheek retractors.

9. For the occlusal view pull the lips away from the teeth. For side views introral one must show up the last erupting molar. One needs to show the canine and molar relationships.

INTRAORAL SCAN

Inspect the sTL file and include clear correct case number before submitting. Scan both arches even if treating one arch. 2-5 mm of gum over tooth zenith on buccal and lingual.

With surfaces include as much of the occlusion as possible and as many occlusal contacts as possible.

IMPRESSIONS

Always take upper and lower

Bite registration optional

Disposable trays are best . do not use mesh or metal trays. Use plastic multi-perforated trays. These will not be returned.

Impression of all teeth required

4mm beyond the zenith of the gingival margin

Extend beyond the terminal tooth

METHOD

Fill the putty and place a spacer and let it fully set in the mouth. Once out use light bodied silicone based impression . Ensure that there are no bubbles, drag, tears and that there are no ill defined margins. Check the gum line. Do NOT use alginate.

An impression is acceptable if it is intact, has well defined margins, one may see the distal surface of the last molars and there are detailed and accurate occlusal surfaces

THE LATEST INFORMATION ON THE 3 SHAPE TRIOS IN RELATION TO CLEAR CORRECT AS AT JUNE 2021

One may use the 3 Shape Trios to submit Clear Correct cases. One may add Clear Correct as a lab.

The Clear Correct Doctor Portal Account is paired with 3Shape Communicate. This only needs to be done once.

Once your Trios scanner is connected to your Clear Correct Doctor Portal Account you may submit a case with the 3 shape Trios scanner.

Once you add the details and patients data you need to follow the scan steps.(upper arch, lower arch, occlusion.)

Be sure to capture 3-4 mm of gingivae if possible. Close all the holes in the scan to remove any unnecessary data. You can also send the scan to your patient via My3Shape App.

How to scan for Clear Aligners with trios

1. Always scan both jaws. For the lower jaw there are three swipes- occlusal, lingual and buccal.

   Collect all the teeth and the spaces between the teeth and 2-4mm of gingivae. When finished, click. Then move to the upper jaw.

2. The upper jaw-occlusal, buccal and palatal. Always include the palatal surface of the jaw in the scan.

3. Start at the buccal surface of the molars and capture both upper and lower teeth. Keep scanning until the scans snap into position but scan at least 4 teeth for perfect alignment.

4. Ehen scanning pay attention to:

   a. Interproximal areas(do not leave them open)

   b. Incisal edges(capture all. Wiggle the scanner)

   c. Gingivae (minimum of 2-4mm for a better fit of the aligner)

   d. Molars.(always capture all the posterior teeth)

Create the order. The Trios Treatment Simulator Workflow helps the dentist communicate with the patient. You may interact with then scan when the Simulator is segmenting the teeth. You may show the differences between pre and post treatment.

The adjustment option gives access to tools that allow movement and rotation of the teeth.

With IVO SMILE ORTHODONTICS one may show the simulation on a photo or live video of the patient. This may be obtained for an I Pad.

THE ORTHO ANALYSER SOFTWARE (OPTIONAL)

This software may be used to submit a case using 3Shape Scanner.

ACTIVE AGEING AND COMMUNITY CARE

A webinar chaired by Dr Wilfred Galea on 10/03/2021.
Summarised by Dr David Muscat.

DR RENZO DEGABRIELE

Carers for the elderly themselves need respite. They may avail themselves of the facility for respite of 9 hours every week for one year so the carer can take care of his/her errands and needs or two half days a week for free. This helps us keep the elderly in the community. The team also prepared vaccinations for administration at home.

ACTIVEAGEING.GOV.MT

The services which Active Ageing provide include:

- Dementia care at home
- Elderly services
- Guardianship
- Home help
- Respite at home service
- Telecare
- Continence
- Physiotherapy
- Night shelter
- Home admissions
- Community geriatrician
- Podology

A doctor needs to fill the appropriate form. This includes medical history, diagnosis, community abilities, psychological state

Details regarding feeding, grooming, dressing, bathing, toileting, mobility, social situation need to be noted. The vulnerable will be given priority. Lonely people will be given more hours.

DR ALEX GOBEY
HEAD OF DEMENTIA SERVICES INTERVENTION TEAM

The Dementia services have several activity centres around the island. There is a dementia helpline dial 1771. One may send an e mail on dit.mfcs@gov.mt This is manned by experienced nurses as well as occupational therapists with Masters degrees. They give guidance to gps and advise regarding referral to memory clinics. They give support including emotional support.

They will provide appropriate application forms. They are the first responders and will see how to manage the situation.

Difficulties and risks are discussed with the pwd and family members and a care plan forward is created.

A follow up is carried out according to the case's needs. The team educates on the condition, connects the family to other required services and manages the case throughout the disease progression. This allows the patients to stay in the community and empowers the carers.

There are activity centres which help. There is one in Gozo at Dar Padova and there will be two others -one in Safi(which also offers a night shelter)and another in Mtarfa.

A night shelter is important as patients with dementia are scared to sleep alone at night. They have problems with sleep patterns. This way the carers can get respite at night.

The WHO last year issued guidelines on prevention of dementia . An active lifestyle is encouraged. Physical activity , a healthy diet .as well as monitoring glucose and cholesterol levels.

DR RENZO DEGABRIELE

An initiative is being launched by which an IT information session for the elderly will be held. This will be coupled with mental health. The IT will help the elderly communicate with their families, as well as tackling solitude wit will provide IT information.

There are other initiatives to combat dementia:

1. University of the third Age
2. Encourage elderly to talk about their hobbies
3. Involve males more in centres
4. Change social lives of elderly

IRIS ZAMMIT

Telephsio: Physiotherapists will call the patient and vet the problem.

Physiotherapy in the community is for persons who cannot leave their home and those considered best seen at home.

OCCUPATIONAL THERAPY

Help elderly purchase equip
Vascular assessment with Dopplers – at home.

With certain operations like knee replacement or after a trauma the physiotherapist attend the next day at the patient's house.

DR MICHAEL FARRUGIA
MINISTER OF SENIOR CITIZENS AND ACTIVE AGEING

At St Vincent De Paul a digitalised imaging Department is being set up. This will provide an X ray with Fluorescent imaging. This will be used for patients who have difficulty in swallowing. In addition a CT scan is to be installed. This will be used to investigate early dementia and will be also used to conduct research into this.

The CT scan will also be used for patients from outside the home. In addition there is to be documentation prepared for the pharmaceutical required. More personnel are to be trained in this sector.

Continues on page 32.

NEW

HELP YOUR PATIENTS ON THEIR JOURNEY TO OPTIMAL GUM HEALTH FOR IMPROVED ORAL CARE

RECOMMEND PARODONTAX COMPLETE PROTECTION – WITH 8 SPECIALLY DESIGNED BENEFITS FOR HEALTHIER GUMS AND STRONGER TEETH

4X greater plaque removal*[1]

48% greater reduction in bleeding gums*[1]

*Compared to a regular toothpaste following a professional clean and 24 weeks' twice-daily brushing.

Reference: 1. Data on file, GSK, RH02434, January 2015.

PM-MT-PAD-20-00007

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ACTIVE AGEING AND COMMUNITY CARE

Continues from page 31.

DR ALEX VELLA

Centru Serrvizzi AnzjanFirst
Contact tel: 22788800
3, Old Mint Street, Valletta
Customer care of Active Ageing:
Aacc-services@gov.mt

They will vet the application/ acknowledge/send to respective sections for processing. There are many facilities such as meals on wheels, continence, night shelters, house acre services etc.

TELECARE

A 2 WAY communication to the call centre. A GPS for tracking with a battery 3-10 days lifespan – can be used outside the home.

PHLEBOTOMY

The service is provided to patients who cannot attend Health care Centres or MDH due to mobility issues/bedbound. GPs, consultamts ,medical doctors should call 22589389 to refer patients after bookIng bloods through ICM or myhealth or the usual normal blood form. The nurse will blood let and transport it directly to Mater Dei. All items are taken care of by the team.

PSYCHOTHERAPY

Addressing solitude especially due to Covid19.In partnership with NGOs and Richmond Foundation. These are a rare commodity but two have been secured for residential homes but there is a plan for them to also work in the community.

THE SILVER T SERVICE

A free transport service which will be provided in 18 localities found on the website for the over 60s who do not drive any more but need to go to their social club, church etc. Book on 21695544 Mon–Fri 7am–2pm.

THE FEDCAR GENERAL ASSEMBLY

THE MEDICAL COLLEGE OF LUXEMBOURG 12 JUNE 2021

The Assembly was held online and was attended by Dr David Muscat and Dr Anthony Charles, Medical Council of Malta elected members .

Summarised by Dr David Muscat.

UPDATING DENTAL TRAINING IN EUROPE

There is a limited mandate:

'The Commission only has the delegated power to amend the minimum training requirements related to subjects ,knowledge and skills .ie. article 34(3) and point 5.3.1 of annex V to directive 2005/36/EC, as amended.'

THE CALENDAR

An announcement was made at FEDCAR in November 2018. Mapping will be done between December 2020 and January 2021.

There will be a workshop on 29th June and the final recommendations will be made by February 2022. The EU commission will be implementing the act in 2022 or 2023.

The objective is to catch up with 40 years of scientific and technological progress in dentistry .

There is to be a study of the programme of Directive 78/687/EEC of 25 July 1978 concerning the coordination of provisions ..in respect of the activities of dental practitioners .

There have been advancements in anaesthetics, high speed drills, restoration materials, computer- aided design and manufacturing technology, reduction of caries, gerodontology and paediatric dentistry .

The exercise is quite ambitious and will test the members states competence.

The issue is one of the Directive's minimum requirements after 40 years of evolution. Automatic recognition relies on mutual trust between members states.

Patient safety needs to be safeguarded and one needs to have safe beginners working on the public at large.

There will be a discussion paper with mapping of 31 countries except Bulgaria and Romania who have not responded to questions by Spark Legal Network who were engaged for this project.

The proposals were based on a majority of 16 countries.

THE DISCUSSION PAPER

Basic subjects ;+1 (Biology, Genetics and regenerative Medicine)

Medico-biological and general subjects '+1 (microbiology and immunology)

Subjects directly related to dentistry;+6.

- Gerodontology and Implantology
- Interprofessional Collaborative Care
- Practice Management(along professionalism,ethics and legislation)
- Community Health
- Digital Technology in Dentistry

There is a move to replace 'Professionalism, ethics and legislation' by 'Practice Management, Professionalism and Legislation.'

OBSERVATIONS

There do not seem to have been changes regarding clinical training.

There are no sub titles or subdivisions and some items such as cariology are not covered.

THE PROPOSED ADDENDUM AT THE END OF THE LIST OF SUBJECTS

Clinical Dentistry should be taught in relation to General Oral Health, Implantology, Odontopaediatrics and Gerodontology, Digital Technology in Dentistry.

The theoretical instruction must be weighted and coordinated with the clinical instruction in such a way that the knowledge and skills referred to in this annex can be acquired in an adequate fashion

OR

The distribution of the theoretical , practical and clinical training among the various groups shall be balanced and coordinated in such a way that the knowledge and experience may be acquired in a manner which will enable dental practitioners to perform all their duties.This is closer to the notion 'a safe beginner.'.

Community Health can be renamed 'Dental Public Health' as there is no existing majority for 'Community dentistry .'this is more in line with the recent WHOs resolution on Oral health in May 2021.

EASY AND COMMON SUB DIVISIONS

Implantology (Pre-implantation evaluation+therapeutic plan +implant surgery +peri-implant plastic surgery +Biomechanics +Implantable prosthesis+Complication Management and follow-up).

Digital Technology in Dentistry (radiology,prosthesis,inter-professional management ,patients record)

Genetics (I.a.regarding Cranio-Facial and dental tissues

Microbiology (I.a. General and also specific to the oral cavity)

WORKSHOP 29 JUNE 13, 2021

Fedcar will be represented by Dr Cedric Grolleau from the French National Order of Dental surgeons.

At the workshop preliminary findings of the study will be presented with the aim of verifying the correctness of the preliminary research outcomes.

A discussion of the main scientific and technical advancements affecting a dentist.

An assessment as to whether an adaptation of the minimum subjects, knowledge and skills under the Directive seem necessary, and if so to provide suggestions on priorities.

Where there is a great degree of consensus, the EU commission is likely to accept changes.

THE MOBILTIY OF HEALTH PROFESSIONALS

There is a resolution by FNOMCeO to raise awareness regarding the disruption of dental education caused by the ongoing public health crises, as well as suggesting measures to be taken to safeguard training of future dentists .

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THE FEDCAR GENERAL ASSEMBLY

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Another resolution was to reassure the public that measures are being taken to ensure students are safe beginners when they graduate and emphasise the important role of the European Education Area in advancing the quality of Dental Education

Resolutions were by ADEE, FEDCAR and EDSA.

The resolution by CED was proposed in November 2020 and endorsed by EDSA.

THE CED POSITION

CED believes that institutions and the dental education community must work together to provide a safe ,inclusive and welcoming learning and working environment for all members of the community during this challenging time.

European Dental Eduction institutions need to adapt their curriculum to current issues and generate clear guidelines while ensuring a high quality and appropriate clinical training.

There is a need to strike a balance between in-person and online teaching.

Dental Education Institutions need to define a set of minimum requirements that need to be fulfilled by students .

SURVEY ON DENTAL HYGIENISTS

In the current national context there is no appetite for EU harmonisation.

The partial access court case 25/2/21 case C-940/19 is relevant.(case in Italy). the Association of Dental Hygienists were seeking autonomy.

The court judgement was that they cannot have partial access to the profession as dental hygienist need to be supervised in a dental clinic by a dentist .

The WHO's historic resolution on Oral Health 28/5/21 -there s no more reference to intermediary professions- these are now Oral Health Professionals.

In Switzerland hygienists are recognised. In Malta certain aspects of their work must be directly supervised by a dentist who has to be present .

PROPOSAL FOR A NATIONAL LIST OF DENTISTS WHO ARE REGISTERED IN MORE THAN ONE COUNTRY

There was a proposal by Italy for a compilation of such a list on a National basis(not EU).

This list will be updated annually and will be shared by FEDCAR members.

This is because dentists who are sanctioned say in France move across the border to say Luxembourg after they appeal then sanction and slip through the net.

Disciplinary sanctions in one country are not necessarily applied in another.

There is also the issue of payment of National insurance for pensions.

Do they pay one or two contributions or both ?

In addition there will be a discrepancy in the number of dentists who actually work in one country.

The proposal was supported by France and Luxembourg by not by Denmark who strongly objected citing data protection issues.

They wish to control the issue of migration . there is also the issue of continuity of care.

Sanctions must be communicated even if they are not finalised as practitioners go to work across the border.

When a case is launched in one country they must be prevented from moving.

One must take stock of migrating practitioners and this is in the public interest.

Luxembourg will now change its procedures and will ask dentists to make a declaration if they have had any sanctioning procedures in any country and if they lie then they will be removed from the register.

It was then suggested to look into the legal merits of this list vis a vis data protection so this will be revisited at our November Assembly.

A legal framework will be prepared.

There is of course the Alert mechanism which has been put into place for dentists who have had sanctions.

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