Dear colleagues,

2018 has drawn to a close and soon we will be making those resolutions. One resolution many should make is to attend local dental conferences. The ones that I have been involved in locally and others that I have attended have always been of a high standard. These conferences entail a lot of hard work and planning and it is fitting that dentists take time out to attend and garner CPD. It is also helpful if conferences do not overlap and are held apart from one another so as to ensure maximum attendance.

The DAM is organising a series of Basic Life Support courses. These will be organised every three months or so and a call for applications for these courses will be made and applicants will be selected on a first come first served basis. The course will usually be a full day course and held at the Hilton. Dr Adam Bartolo runs the courses. These are co-ordinated by Dr Noel Manche and Dr Ann Meli Attard. A lecture on ceramics is envisaged as well as a lecture on infectious diseases. We are also planning lectures on Carpal Tunnel syndrome in relation to dentistry and also Fibromyalgia. I would like to feature some presentations from this year’s ‘Smile For Health’ Conference in this issue and I would like to thank the authors for their co-operation.

We mourn the loss of Dr Herbert Messina Ferrante who passed away on New Years Eve. May the Lord grant him Eternal Rest. He was one who always fought for the rights of the dentist. The lion roars no more but his spirit is still with us.

The cover picture is by Dr Josef Awad and it is of the Church of Saint John the Baptist in Xewkija Gozo. The Dental Association Christmas Party was held on the 12th December at the Hilton.

Best regards,

David

Dr David Muscat B.D.S. (LON)
Editor / Secretary, P.R.O. D.A.M.
Your dentures gave them confidence. We’ll keep it going.

You can be confident in the knowledge that you’ve given your patients specially made and well-fitting dentures. However, your denture-wearing patients can have concerns around denture retention and trapped food, making it difficult for them to emotionally adjust to living with dentures. They may not tell you, but more than 1 in 3 denture wearers admit to skipping social activities because they are conscious of their dentures.

Up to 29% skip eating out in public; 86% experience food trapping under their dentures and 55% experience denture movement.

These everyday challenges can hold your patients back from living life to the fullest.

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Corega Ultra Fresh denture adhesive can support your patients’ throughout their denture-wearing journey.

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Corega Ultra Fresh denture adhesive – Offering your patients reassurance for everyday life

Corega adhesive reduces food entrapment vs. no adhesive use (p<0.0001) in well-fitting dentures

<table>
<thead>
<tr>
<th>Weight of peanut particles recovered from beneath dentures (grams)</th>
<th>No adhesive</th>
<th>Corega Adhesive</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.04</td>
<td>74%</td>
<td></td>
</tr>
<tr>
<td>0.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.02</td>
<td></td>
<td></td>
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<tr>
<td>0.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Corega Ultra Fresh denture adhesive improves patient comfort, confidence and satisfaction even in well-fitting dentures.
STAGING AND GRADING OF PERIODONTITIS

Continues from page 5.

Pathogenesis of Periodontitis (Page and Normann, 1995)

- No definition of health, or what constitutes the "normal patient"
- No way to classify a treated patient – once diseased always diseased
- No mention of implants
- Developmental/ethnic/categorical mixed up: gingival defects with tooth defects (e.g. enamel pore vs) with tooth pathology (e.g. root fracture)

CRITICISMS OF 1999 CLASSIFICATION

- Classification had too many items and poorly extrapolated
- Aggressive disease was not defined and chronic was defined almost by exclusion
- Many of the criteria for aggressive disease were not validated in studies
- Overlap and lack of precision of disease definitions meant many clinicians not always comfortable with the criteria

CRITICISMS OF 1999 CLASSIFICATION

The diagnosis based on the clinical and radiographic examination is that of generalized chronic periodontitis. How small arrangements in non-class patient becomes a cause of death non-surgical periodontal treatment and will not ensure a repeat back to you after this has been completed and reviewed. Given this patient shouldn’t missing it may be necessary to repeat the diagnosis to that of aggressive periodontitis and instead we will work to treat her comprehensively in elastic, pocketing as much as possible.

Continues on page 8.
STAGING AND GRADING OF PERIODONTITIS

Continues from page 6.

A change in the fundamental ideas of periodontology

- We are holobionts

Fundamental shift in thinking

- Plaque causes reversible gingival inflammation – still true
- Low levels of plaque commensurate with health in spite of generating measurable responses
- Plaque does not cause periodontitis
- Bugs drive the immune system AND the immune system drives the bugs
- Patients are individuals with risk profiles – “precision medicine”

Contemporary model of host-microbe interactions in the pathogenesis of periodontitis. Chapple 2015

Workshop on Classification, November 2017, Chicago

HOW could we classify disease?

- Aetiology
- Pathogenesis
- Clinical description of pathology
- Severity
- Etiology
- Biomarkers
- Patient outcomes

Workgroups

- 1. Periodontal and Gingival Diseases and Conditions
- 2. Periodontitis
- 3. Periodontal manifestations of systemic diseases and developments and acquired conditions
- 4. Periapical diseases and conditions

- Total of 23 papers which collectively redefine periodontology

Group 2 - Periodontal Health and Gingival Diseases and Conditions

- Primary health defined histologically
- Almost never seen clinically – not “normal”
- Gingival health: An absence of clinically detectable inflammation – There is a biological level of immune surveillence consistent with clinical gingival health and homeostasis
- Case versus Site of Health/Inflammation (gingivitis)
- Clinical health can be restored following treatment of gingivitis or periodontitis

Classification of health

- Clinical Gingival Health on intact Periodontium
- Clinical Gingival Health on Reduced Periodontium
- Stable periodontitis patient (success/failure/treatment)
- Non-periodontitis patient (e.g. lengthening, toothbrush trauma...)
- INTACT means absence of detectable attachment or bone loss

Continues on page 10.
STAGING AND GRADING OF PERIODONTITIS

Classification of Plaque Induced Gingivitis
- On intact and reduced periodontium
- Local and systemic risk factors
- Case defined by bleeding index < 30%, 30% rule

Classification of non-Plaque Induced Gingivitis
- Rationale: as a surgical stage – genetic/developmental, specific infections, inflammatory & immune, reactive, biologic, endocrine, nutritional and metabolic disorders, traumatic, pigment

Continues from page 9.

Findings of position papers of Group II
- 1. There is no evidence of specific pathophysiology that enables differentiation of cases that would currently be classified as aggressive and chronic periodontitis, or provides guidance for different interventions.

Findings of position papers of Group II
- 2. There is little consistent evidence that aggressive and chronic periodontitis are different diseases, but there is evidence of multiple factors, and interactions among them, that influence clinically observable disease outcomes (phenotypes) at the individual level. This seems to be true for both aggressive and chronic phenotypes.

Findings of position papers of Group II
- 3. On a population basis, the mean rates of periodontal progression are consistent across all observed populations throughout the world.

Findings of position papers of Group II
- 4. There is evidence, however, that specific segments of the population exhibit different levels of disease progression, as indicated by greater severity of clinical attachment loss (CAL) in subsets of each age cohort relative to the majority of individuals in the age cohort.

Conclusion 1 - Lets keep ANUG and ANUP
- There is sufficient evidence to consider necrotizing periodontitis a separate disease entity.
  - Evidence:
    1. a distinct pathophysiology characterized by prominent bacterial invasion and ulceration of epithelium
    2. rapid and full thickness destruction of the marginal soft tissue resulting in characteristic soft and hard tissue defects
    3. prominent symptoms
    4. rapid resolution in response to specific antimicrobial treatment.

Conclusion 2 – Lets keep Perio as a Manifestation of Systemic disease
- Systemic diseases which severely impair host response
  - Primary diagnosis should be the systemic disease according to ICD
  - For the true being, periodontitis observed in poorly controlled diabetes is a comorbidity (two primary diagnoses).
The secret lies in the combination of materials

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

We care for healthy smiles

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Continues on page 13.
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Diameters (Ø 3.75, Ø 4.2, Ø 5)

**NEW**
Mountless Packaging

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**STAGING AND GRADING OF PERIODONTITIS**

*Continues from page 12.*

**What constitutes a case of clinical periodontitis?**
- Incisional CAL is detectable at two or more non-adjacent teeth OR
- Buccal/lingual CAL of 3 mm or more with pocketing of more than 3 mm at two or more teeth AND
- The observed CAL cannot be ascribed to non-periodontal causes such as traumatic occlusion, malocclusion, endo-lesion, root fracture

**“detectable”**
- Keeps a consistency of histological and clinical definitions
- Recognises that clinical experience (operator training and skill) and conditions (restorative margins/nature of tissue tightness) may affect the ability to detect CAL
- In the very early stages of disease error in the probe and the operator will lead to misclassification
- Cannot be used epidemiologically where a specific threshold based on measurement error will need to be set
- Thresholds chosen will affect sensitivity and specificity

**What else should a classification capture?**
- Severity of disease
- Rate of occurrence of bone loss attributable to periodontitis
- Complexity of management
- Extent of disease
- Rate of progression
- Risk factors
- Interrelationship with general health

**Staging**
- Approach used for many years in oncology
- Relies on severity and extent of presentation but also introduces the dimension of complexity of management
- Allows us to define the disease state at various points in time
- Rarely communicated
- May be a factor in assessing prognosis
- A step towards personalized precision medicine

**Grading**
- Rate of periodontitis progression
- Recognised risk factors for progression
- Risk assessment of the individual case affecting systemic health

**TABLE 1**

<table>
<thead>
<tr>
<th>Stage</th>
<th>Number of Teeth</th>
<th>Classification</th>
<th>Disease Progression</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1/2/3</td>
<td>Light</td>
<td>Minimal or moderate</td>
</tr>
<tr>
<td>2</td>
<td>1/2/3</td>
<td>Moderate</td>
<td>Significant</td>
</tr>
<tr>
<td>3</td>
<td>1/2/3</td>
<td>Severe</td>
<td>Severe</td>
</tr>
</tbody>
</table>

**COMING SOON!**

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Simplantology, in Everything We Do
STAGING AND GRADING OF PERIODONTITIS

Stage I periodontitis
- The borderland between gingivitis and periodontitis
- Earliest attachment loss in response to persistence of gingival inflammation
- Not just an early diagnosis – at an early age this would represent increased susceptibility to disease initiation
- Population level – maybe a cost-effective point for simple intervention
- May be a good target area for biomarkers or new imaging technologies to supersede limitation of CAL detection with a probe

Stage II periodontitis
- Established periodontitis
- Clearly identifiable from probing examination
- Straightforward management with SPC and debridement
- Expect diverse arrest – evaluation of this response to standard treatment is essential as it may guide us to alter the grade and intensify treatment for non-responders

Stage III periodontitis
- Significant damage has occurred
- Tooth loss may occur in the absence of treatment
- Deep lesions extending to the middle of the roots
- Mucogingival defects, function involvement, history of periodontal tooth loss/pocket and ridge defects may complicate the management
- However the overall picture is of a functional dentition which does not require rehabilitation beyond the management of what we would previously call severe periodontitis

Stage IV periodontitis
- Osteone has caused considerable damage including possible tooth loss leading to loss of function or aesthetic function
- Detention is at risk of being lost
- Deep periodontal lesions extending to the apical portions of the roots
- History of tooth losses
- Mobility due to secondary occlusal trauma
- Posterior bite collapse, drifting, spalling
- Detention requires rehabilitation over and above periodontal treatment

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The result
• Easier and more natural handling.
• Safer and more accurate work performance.
• More comfort for tendons and muscles.

Grading
• Validated risk assessment tools can estimate risk of progression and tooth loss.
• Previous classifications had the concept of grade encumbered in separate specific forms (aggressive, usually inert, rapidly progressive) which placed focus on the identification of a “separate” disease rather than the factors leading to the progression.

What do we look at to choose a grade?
• Recognised risk factors (smoking / diabetic control / fam hist)
• Disease severity and progression as a function of age
• Bone loss % (calculated as gain/patient/area/scale of implant)
• CAL percentiles for populations
• Such calculations need to account for tooth leaves otherwise are worthless
• Biomarkers may be introduced into the system when validated
• Responsiveness to treatment

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Stage and Grading Periodontitis

Staging and grading of Periodontitis

Staging and grading

Stage

1. Initial
2. Established
3. Advanced
4. Progressive

Grading

1. Validated risk assessment tools can estimate risk of progression and tooth loss.
2. Previous classifications had the concept of grade encumbered in separate specific forms (aggressive, usually inert, rapidly progressive) which placed focus on the identification of a “separate” disease rather than the factors leading to the progression.

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4. CAL percentiles for populations
5. Such calculations need to account for tooth leaves otherwise are worthless
6. Biomarkers may be introduced into the system when validated
7. Responsiveness to treatment

CASE 1 - 2013

M
37 years
Clear MH
Recession
### CASE 1 - 2018

- **Periodontitis Stage / Grade A**
- Gingival health with reduced attachment.
How to Reverse Type 2 Diabetes Mellitus in the Obese Patient

Comments by Dr Charles E. Corney, Medical Researcher

We have known about diabetes for 3000 years and also how it can be controlled. However, a simple, permanent cure or reversal has not been obtained until very recently.

In 2014, Roy Taylor, Professor of Medicine at Newcastle University, UK, publicly announced an amazing message from his research on many patients (published in the Lancet medical journal) that diabetes type 2 (T2DM) in the obese patient can be reversed permanently by using a specially designed very low (600) calorie diet daily for just 8 weeks, inducing an ideal weight loss of at least 15kg down to a normal Body Mass Index of around 27. If the history of this type of diabetes is longer than 10 years, this technique may not work.

Prof. Taylor’s explanation is very simple. Such a patient commonly has a history of eating too much junk food. These excess carbohydrate calories are converted by insulin to fat. Consequently, the patient is obese with accumulation of fat in and around the liver which damages insulin, preventing glucose entering the cells of the body (known as insulin resistance).

As a result, there is pooling of both insulin and glucose. This excess of insulin deposits more liver fat which now starts to secrete excessively concentrated immune chemicals (known as autoimmunity cytokines) which cause further liver fat deposition, increased cholesterol and triglycerides, raised blood pressure, and areas of chronic inflammation in many parts of the body. These reactions are collectively known as the Metabolic Syndrome, which, with the ever-rising blood glucose levels, slowly changes into T2DM.

Once this stage is reached, it cannot be reversed by conventional glucose lowering drugs such as metformin or insulin, or by eating a lowish calorie weight reducing diet of 1200 calories daily. Consequently, the diabetes becomes a relentlessly progressive disease.

However, Prof. Taylor’s scheme of drastically starving (600 calorie diet daily) the fat from the liver which, by lowering the insulin resistance, does reverse and switch off the T2DM and its side effects permanently.

Next, the excess abdominal fat accumulates also in the pancreas, killing the insulin secreting cells, so there is no insulin available. The patient then requires permanent insulin injections.

Continues on page 36.

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In an increasingly litigious environment, medical decisions and actions may be challenged and disputed. Are you protected?
Help keep your patients on a journey to healthy gums

At least 50% of adults suffer from gingivitis globally, but 2 out of 3 take no action.

Periodontal disease impacts daily life
Patient insight research shows that gingivitis can have a negative impact on daily life causing anxiety, embarrassment and affecting social life, especially when symptoms become noticeable to others.

parodontax® toothpaste helps to free patients from the wider effects of gingivitis.

After 30 days, patients reported:

- Less anxiety: 2 out of 3 patients no longer worried about their gum health
- Better social life: 2 out of 3 patients no longer avoided social situations
- Greater confidence: 2 out of 3 patients were more confident

Treat and Maintain
In addition to good oral hygiene and professional advice, patients with, or susceptible to gingivitis may benefit from the addition of parodontax® for their optimum gum health.

4X greater plaque removal
48% greater reduction in bleeding gums

Recommend parodontax® toothpaste to help patients maintain their optimal gum health between dental visits.

References:
1. CDC Perio 2016; Half of American Adults have Periodontal disease.
2. Segmentation, August 2015.
3. of gum disease, March 2016.
5. 
6. 
7. Compared to a regular toothpaste following a professional clean and 24 weeks’ twice-daily brushing.

Appendix A

- CAL of ≥ 2 mm is considered initial disease
- CAL of ≥ 4 mm is established disease
- CAL of ≥ 5 mm designates severe destruction
- CAL of ≥ 8 mm represents very severe disease

Corresponding values for RPL are:
- < 15%
- 15–25%
- 25–44%
- > 50%

CASE 2

- Periodontitis, Stage IV Generalised, Grade C
STAGING AND GRADING OF PERIODONTITIS

Continues from page 25.

Case 3
- F
- 55 years
- Type 1 Diabetes HbA1c 6.8%
- Non-smoker
- No Family History

What next?
- BSF providing a series of webinars on the subject
- Flowchart for clinical use to integrate BPI examination into new classification — to be published 2019
- Roll-out of new classification in clinical practice
Multidisciplinary treatment of developmentally missing teeth

Simon Camilleri PhD MOrth FDS

Developmentally missing teeth

A tooth is defined as developmentally missing if:
- It has not erupted into the oral cavity
- It is not visible on a radiograph

Psychosocial

Hypodontia affects quality of life
- Measure is Oral Health Related Quality of Life (OHQoL)
- Impact of hypodontia is considerable
- Gender related (girls boys)
- Not related to number/location of missing teeth
- Provision of prostheses improves score

Deciduous dentition

Prevalence
- Less common in primary dentition – 0.4 to 0.9% (Grahnen and Granath 1961)
- Generally one or two teeth missing, no sex bias (Aste 2001)
- Strong correlation between hypodontia in primary and permanent dentitions

Epidemiology

Caucasian data
- Common missing tooth is 3rd molar - 20-36%
- Lower second premolar - 3.4%
- Upper lateral incisor - 2.2%

However if only 1 or 2 missing teeth then incisors most frequently absent

Epidemiology

Local data
- Survey of 530 schoolchildren in 2020
- High prevalence of lateral incisor hypodontia (>1%)
- High prevalence of ectopic teeth, especially maxillary canines (>5%)

Epidemiology

Local data
- In a hospital-based survey, the prevalence of hypodontia and other dental anomalies was found to be significantly higher than that in the published literature

Epidemiology

Origins of Population
- Origins of population uncertain, possibly Rhodesian/Carthaginian
- Islands invaded and left uninhabited by Romans about 800 AD, repopulated primarily from Sicily 300 years later
- Colonists and slaves gathering resulted in population growth
- Military society from Knights of St John and hundreds through British forces allowed exponential population growth from c. 8000 to 400,000 in a space of 23 generations

Continues on page 30.
MULTIDISCIPLINARY TREATMENT OF DEVELOPMENTALLY MISSING TEETH

Epidemiology
Origins of Population

- Genes present in early population may be over or under represented in present population through a process known as ‘gene drift’
- Purely random, these traits do not offer any selective advantage
- Phenomenon known as ‘Founder Effect’. Several examples in Maltese medical literature

Genetics

- Genetics
  - Oligodontia - Syndromic
    - Generally inherited in a recessive pattern
    - Hypodontia or hypodontic syndrome
    - EDARAD1/EDAR genes
    - Abnormal development of occlusal structures including the jaw, teeth, and nasal glands
    - Multiple missing unerupted and infant teeth
    - Severe forms require multidisciplinary specialist treatment

- Genetics
  - Oligodontia - Neuromuscular
    - Autosomal dominant
      - X-linked
      - AR
      - ALVMD - linked to colorectal cancer
      - UOPM mutations found in 5-20% of cases of neuromuscular oligodontia
        (in-situ mutation)
      - Variable expression
      - Variable penetrance

Management

- Periodontal ligament maintains alveolar bone
- Deciduous teeth should be left in situ as long as possible in order to preserve the ridge until adulthood

Interceptive

- Retained deciduous molars
  - If no crowding and the crown/root in good condition may leave in situ as these last a long time.
  - Submerging deciduous molars may be built up with composite and eventually ceramic onlays keeping the occlusion high may break the ankylosis

Environmental

- Diet
  -rickets, nutritional disturbance
  - Iron deficiency
  - Chemotherapy
  - Prevalence of hypodontia reported higher in twins - possibly due to higher nutritional demands (Kenne 1971)
  - Discordance of identical twins may be due to different position in uterus leading to different blood supply - nutrition?

Definitive treatment

- Open or close spaces
  - Orthodontic considerations

- Space available (or can be created)
  - for prostheses
  - Number of missing teeth
  - Incisor relation
  - Class 2 - easier to close upper spaces
  - Class 3 - easier to open upper spaces
  - Opposite applies to lower arch

Continues on page 29.

Continues on page 32.
MULTIDISCIPLINARY TREATMENT OF DEVELOPMENTALLY MISSING TEETH

Continues from page 31.

Open or close spaces
Orthodontic considerations

- Symmetry and centrelines in unilateral cases
- Smile line
- Gingival margin levels
- Buccal segment occlusion – can this be altered?

Open or close spaces
Orthodontic considerations

- Steep cuspy/low FMA – hinders tooth movement
- Reduced number of teeth - anchorage problems
- Anterior space closure may be problematic, particularly in Class 1 or Class 3 cases
  - Intermaxillary elastics
  - Headgear
  - TADS (miniscrews)

Open or close spaces
Orthodontic considerations

- Space required in incisor region determined by:
  - Golden proportion
  - Lower incisor should be 1/2 (50%) width of central
  - 1.5 to 2mm space on either side of implant for papilla formation
- Roots must be parallel or slightly divergent to allow implant placement
  - Take care preoperatively before treatment and prior to decision to confirm final rest position

Open or close spaces
Orthodontic considerations

- Similar considerations for the lower arch
  - Close space
    - Lower centrelines?
  - Open space
    - 1 to 2 more teeth?

Open or close spaces
Restorative factors

- Screw-retained crowns
- - Implant crowns or fixed bridge
- - All ceramic crowns
- Aesthetic considerations
- - Canine guidance is important
- - Smile line
- - Contour
- - Gingival margins

Orthodontic Management
(What can orthodontics do to help?)

- Overbite reduction
- Space closure/opening
  - Aesthetics considerations
    - Golden ratio and gingival margin levels
    - Retractable space in the arch
    - Upright teeth to aid preparation
    - Extrusion/intrusion of teeth

Overbite reduction
- Hypodontic cases often have reduced vertical dimensions
- Forward growth rotation makes OB reduction difficult – and makes prosthesis placement difficult
- Rootine
  - Lengthening
  - Antagonistic/Competition
  - Mandibular incisor
- Curves of Spee
- Intermaxillary elastics
- Intrusions arch
- TADS (miniscrews)

Space closure
Aesthetic considerations

Several factors affecting smile aesthetics:

- Smile arc
- Symmetry
- Gingival exposure and gingival margins

Space closure
Symmetry

Symmetry is always a problem in unilateral cases
Extraction may be unconventional

Space closure
Gingival margins

If smile line is low, gingival aesthetics are not important. Here:

- Gingival level
- Reduced in size
- Contoured
- Gingival margin lower than central
  (Though the premolars still look like premolars)

Space closure
Gingival margins

Higher smile line

Missing UR central incisor

- Space closure
  - Good occlusion
  - Improved esthetics
  - Control
  - Gingival
  - Vermillion

Continues on page 34.
MULIDISCIPLINARY TREATMENT OF DEVELOPMENTALLY MISSING TEETH

Continues from page 33.

**Space closure**

Uprighting to aid correct preparation

- When replacing a central with a lateral
- Middle of spaces
- Tip crown distally to allow equal crowning on both sides
- Intricate to allow
- Equal gingival margin levels
- Placement of restorative material incisally
- Reduce overbite
- Result will rarely be 100% due to difference in neck width

**Redistribution of space**

- Ideal position for peg laterals to be built up is slightly closer to central than canine – 1:3:2:3
- Distal edge of lateral is curved, therefore more amenable to crowning
- Mesial edge is straighter

**Space opening**

- Generally easier than space closure
- May need to extract/strip enamel to provide sufficient space
- May be preferable if smile line high
- Push/pull mechanics
- Roots must be parallel to allow implant placement

**Extrusion/Intrusion of teeth**

- Buried teeth may be extruded and brought into function
- Intrusion of overerupted teeth

**Autotransplantation**

Placement of premolar teeth in incisor area
- Premolar usually extracted due to crowding
- Usually root is formed but apex still open
- If apex closed, will require RCT – reduces prognosis
- Space must be available or be created
- Graft site must have adequate bone
- Extraction must be ultrasonic and preserve periodontal ligament

**Retention**

- The less crowding originally, the greater tendency to real-orienting of spaces
- Removable retainer
  - Fixed retainer – beware of detachment*, particularly upper arch + 3% within 4 years**
  - Non-extraction means of teeth
  - Combination

*From:7, 12.10. 844. Reconstructed tooth position in mandibular longitudinal section. Reprinted with permission from FRIER (1983) 844.32.111.311.32.
NAME: __________________________
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Please cut out this section and send with a cheque for 50 euro payable to Dental Association of Malta for your 2019 DAM membership - the best 50 euro investment ever!

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

PAYMENT FORM

Another common cause of obesity is excessive alcohol intake. One of the features of alcohol is that the vast majority of calories in it are of the alcohol type (usually 100—200 or more calories per tin) and not of the carbohydrate type which is often low. The advertisers laud it as a low carb drink to keep down weight but, omit to say that large numbers of alcohol calories are present, so fat is deposited and the weight rises! Furthermore, the liver breaks down the alcohol into an intermediate known as acetic acid which takes much longer time to be completely broken down, resulting in the breakdown of fats being slowed. Hence fat accumulates yet again.

The high blood glucose of uncontrolled diabetes mellitus damages and narrows the arteries, producing stroke, heart attack, renal failure, blindness and limb artery blocks—sometimes requiring amputation. The same happens with nicotine when the patient smokes. The effect of both together can be devastating, so the diabetic patient should never smoke. Also, nicotine slows weight loss when attempts are made to do this.

PROF TAYLOR’S VERY LOW CALORIE DIET (600 CALORIES/DAY)

All daily meals are replaced by sachets containing high amounts of protein and vitamins and low amounts of carbohydrates. The protein curbs hunger and varying tastes relieve monotony. Each sachet contains 200 calories, so by using three of these per day supplies 600 calories/day. In his research, Prof Taylor used Optifast sachets, but he informs me that Exante is an equally good alternative. Do not eat any additional food, such as fruit. Drink 3 litres of water or calorie-free beverages daily, but do not drink alcohol. Walk for 30 minutes per day. Avoid aggressive exercise as you will feel tired. Follow this diet for 8 weeks, with regular weight and abdominal circumference measurements. The latter is normally less than 100cm for men and 90cm for women. Regular estimations of fasting blood glucose should be performed, as it will slowly drop, requiring stepped reduction of all the medication associated with the diabetes.

At 8 weeks onwards, check if diabetes is reversed. Is the fasting blood glucose now normal? If yes, replace some or all of the carbohydrate meals—such as breakfast two eggs, lunch ham salad and dinner chicken and coloured vegetables.

If the fasting blood glucose rises above normal, revert to 3 sachets daily for 4 weeks, but keep retesting the fasting blood glucose until it stabilises on normal levels. Then we can hopefully say that the diabetes has reversed, permitting a restart of the meals. However repeated checking for the next 2 years is still necessary. Prof Taylor informs me that almost all diabetic complications resolve, but the genetic risk to the offspring is reduced but not entirely eliminated.

FACTS AND MYTHS ABOUT FOOD

• The curse of the carbohydrates – glucose – fattens
• Processed food, additives, alcohol fatten
• Fresh fruit fructose does not fatten but synthetic fructose sweetener does
• Fat does not fatten, but transfat (margarine/lard) does
• Cholesterol (e.g. eggs) doesn’t cause cholesterol

CONCLUSION

T2DM incidence in Malta is 10%, having almost doubled on the last ten years, and it is still increasing. So, the simple technique of its permanent reversal will have a profoundly beneficial effect on the nation’s health.

Note
1. A return to bad eating or alcohol lifestyles will cause the return of the T2DM and obesity.
2. Reversal of T2DM in the slim patient and in the T1DM, T3DM and T4DM patients cannot be performed by the above technique.

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Prof Taylor’s Very Low Calorie Diet

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How to Reverse Type 2 Diabetes Mellitus in the Obese Patient
As you leave a wonderfully formal black tie evening at one of the majestic Palazzos in Mdina in the cold crisp air late into the night and gently pick up speed down the Saqqajja hill under a full moon and a starry sky, you may be forgiven in failing to resist the temptation to squeeze down on your accelerator in the absence of any traffic. Approaching Notary Zarb street in Attard it is well advised to reduce your speed to that of a slow horse and carriage as there is a hawk eye speed camera opposite Messina De Ville, house of the late Dr Herbert Messina Ferrante. ‘The reason I lost so many Attard Council votes’ lamented Herbert once at a meeting we had attended together, ‘because I was blamed for putting the camera there’.

Like him or hate him, Herbert was no ordinary person. ‘Always consider yourself superior in an argument’ he once told me, a fighter who tried to take no prisoners. He was brash and abrasive in his conflicts when he crossed swords, but a joy to work with when there was agreement on the goal which was required to be reached. He was also in the Committee of the Malta Football Association. He also served as vice President to the Malta Football Association Council and as chairman of its disciplinary appeals Board.

He received the National Order of Merit in 2012, an honor which was very close to his heart. He received an award from The Dental Association of Malta for his contribution to dentistry as well as another award from the Medical Council of Malta for his sincere contributions during the many years of active membership on the Council’s Committee. He was also awarded the French Pierre Fauchard Award for Dentistry, the Distinguished Leadership Award. Herbert was a Knight of the Holy Order of the Sepulchur of Jerusalem, a Commander of the Order of Saint Lazarus of Jerusalem, and a Knight of the Angelic Order of Constantine The Great.

Dr Herbert Messina Ferrante passed away on New Year Eve and is survived by his wife Elizabeth, their son Edward, his wife Daniela and their two children Marcus and Elisa. Herbert may not be with us anymore but his passion towards anything he dared to be involved with was to be greatly admired. His baritone voice, booming laugh and big smile will never be forgotten. I am sincerely proud to have known and worked aside such a great personality who possessed such a rich character and a sense of humour. ‘Au revoir dear colleague, you are and will be missed.’

Now Messina De Ville is silent. The Alsatian whines and seeks her master but he is no longer there. His portrait near the marble stairs stares down at the living and at midnight. Each chime is like a final heartbeat. Leaves circle round in eddies in the strong wind near the imposing ornate gate. The candle in his study flickers one last time until it is slowly extinguished. A little whisper of smoke trails to the stucco ceiling and the halo slowly dissipates into nothing as a new year unfolds and the past gently rolls into the present.
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