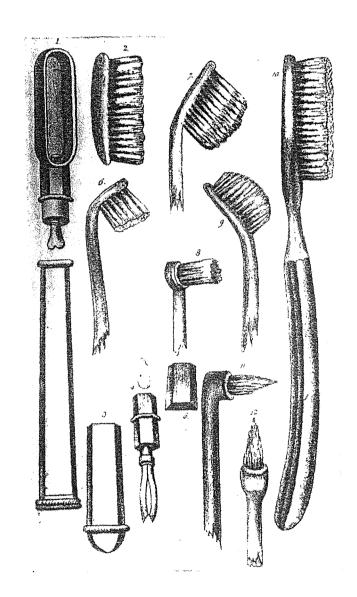


#### A NEWSLETTER BY THE DENTAL ASSOCIATION OF MALTA FOR THE DENTAL PROFESSION

Issue No. 15

June 2005



One of the earliest illustrations of tooth-brushes as we know them today. From a book by F. Maury, published in Paris in 1833.

#### Dear Colleagues,

The Dental Probe forges ahead with its' 15th issue. I have secured many sponsors and mobilized many companies to help us.

The association has reached out to diverse establishments and from now on, with the production of your new laminated membership card DAM members and their spouses can benefit from a plethora of benefits. We have negotiated:-

- 1. 10% off membership and treatments at FORTINA HOTEL FITNESS CENTRE.
- 2. 10% off OPTIKA, SLIEMA (over LM10).
- 3. A generous package from ST. JAMES CAPUA HOSPITAL.
- 4. 10% off MPS medico-legal insurance
- 5. A substantial reduction in BUPA Medical Insurance.

( Nos. 4 and 5 were already in force)

From now on, a CPE certificate will only be given to fully paid-up members of the association for lectures and events organized by DAM. If will eventually become procedure to also only invite members to DAM events. It will soon be mandatory to have a minimum of CPE hours to practice dentistry, so I suggest you get your subscriptions in the post if you have not done so already.

Following lengthy meetings which Adam, Simon, Kevin and Herbert were involved in and also with the intervention of Jeffrey Pullicino Orlando, the Minister of Health Dr. Deguara has finally cleared up the issue of where the GDP stands with regards to certain dental procedures. The new DAM Membership card will in fact also serve as an ID card providing you with proof of your status as a dental professional, say if you need to purchase medicine whilst abroad.

For those who still have not sent their subscriptions please send a LM 20 Cheque payable to :- DENTAL ASSOCIATION OF MALTA, C/O DR. EDWARD DEMARCO, THE TREASURER, "SOLEMAR", TRIQ IL-KITARRISTI, B'BUGIA.

I am encouraging members to write about their pastimes, philanthropic or otherwise. To write an article for the newsletter, please email me on :-empire@maltanet.net.

The exhibition of pharmaceutical products was very well attended and well presented. For those of you with diabetic patients, a Dulcior sugar substitute in the form of a spray and liquid is available. Cataflam is now also available in different doses; Listerine is now back heavily on the market. Cherubino has got Sogeva Indicator Strips for steam sterilisation for those of you who seek them.

A great website for dental news and articles is :- smile-on.com

Regarding our dental committee, Martha, our president, has been busy working on guidelines regarding autoclaves. Our vice-president, Adam has been busy with dental politics. Audrey is attending the DLC EU Meeting in Cologne.

On 24th May Dr. Christopher Barbara lectured on Blood Borne Viral Infections (kindly sponsored by Pfizer-Listerine of Alf. Gera and sons). Cherubino and Nobel-Biocare organized a hands-on Implants course on 20th and 21st May. There will be a DAM lecture by Dr. Paul Cuschieri on 6th June re "Understanding Bacterial Resistance to Antibiotic Resistance" kindly sponsored by G.S.K.(augmentin) and Optident organised an exhibition of their products on 30th May.

BY SHOWING UNITY WE CAN ACHIEVE MORE.

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



#### Activities

As part of the annual activities of the Dental Association, we are trying to organize two interesting events within the next few months. The events will be organized only if the turnout of participants is good enough, and knowing many of you, I think the outcome will be good. The days of the events are still to be decided and more information will be given during the upcoming lectures. These activities are ideal for us as an association to get together in a relaxing atmosphere and have fun. Of course, the events will only be open to current members of the association, so please pay your membership fees as soon as possible.

Badger Karting – a Grand Prix consisting of groups of 10 drivers. Each group will have a 5-minute qualifier followed by a 10-minute race. Once all groups would have completed their race, the top 2 drivers from each group will move on to a 10-minute grand final race. Trophies will be presented to the top 3 drivers. Price: Lm 10 pp.

Paintball – A fighting adventure consisting of groups of 10 with 30 minutes of shooting at your colleagues and ammunition of 250 paintballs. License to kill available. Price: Lm 13 pp.

HRT AND THE ORAL CAVITY

by DR DAVID MUSÇAT B.D.S. (Lon)

HRT has had a lot of adverse publicity of late, but it is of benefit to oral tissues.

Oral complaints are quite common amongst post menopausal women.

It is important for the general practitioner to be aware that the administration of estrogen provides significant relief from oral discomfort, burning, bad taste and dryness, which may be experienced by these women.

These changes may reflect epithelial

responses to estrogen by the oral mucosa in a manner similar to that of the vaginal mucosa. Oral alveolar bone loss is strongly correlated with ostcoporosis, and the salutary effect of estrogen on skeletal bone mass should also be manifest in oral bone structures.

REF 1 DANIEL 1983 Postmenopausal tooth loss, contribution to edentulism by osteoporosis and cigarette smoking.; ARCH.INTERN. MED.143, 1678-88

REF 2 KRALL ET AL 1994; Tooth loss and skeletal bone density in healthy post menopausal women. OSTEOPOROSIS INT. 4.104-9.

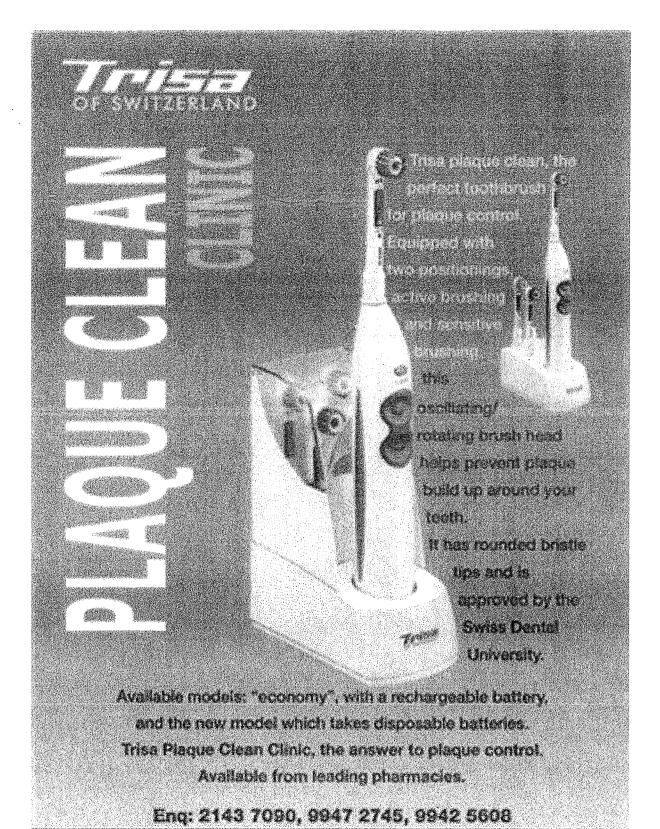
REF 3 PAGANINI.HILL 1995 ARCH INTERN.MED 155 2325-9; The leisure world cohort/Tooth loss and edentulousness were significantly reduced in estrogen users as compared to non-users. There was a correlated reduced need for dentures. The beneficial effect was greater with increasing duration of estrogen use.

REF4.GRODSTERN, COLDITZ, STAMPFER 1996. Postmenopausal hormone use and tooth loss — a prospective study. THE NURSES'HEALTH STUDY; J.AM.DENT ASSN. 127 372-7; There was a reduced risk of tooth loss in estrogen users of 25%.

The effect of estrogen treatment on collagen is evident in bone and skin; bone mass and collagen decline in parallel after the menopause, and estrogen treatment reduces collagen turnover and improves collagen quality.

NATURAL THERAPIES; ie. Herbs that contain estrogen-like compounds such as ginseng, agnus castus, red sage, black cohosh and beth root should be discouraged. The reason for this is that the estrogen doses and purity of herbal preparations are unknown. There are no substantial studies which document either their harmful or beneficial effects.

IMPORTANT herbs are often contaminated with heavy metals.



Page 4

GENERATIO

When you diagnose sensitivity



You need the right tool to fight it



UNBEATABLE SENSITIVITY RELIEF + COMPLETE CARE
+ FRESH BREATH + GREAT TASTE

Colgale (Sinthly Everyday protection from sensitivity

#### Agreement between Saint James Hospital Group and The Dental Association of Malta.

We are very pleased to announce that an agreement has been reached between the Saint James Hospital Group and The Dental Association of Malta. Through this agreement D.A.M. members and their spouses will benefit from preferred rates on various medical, surgical as well as Cosmetic Services offered by the Saint James Hospital Group.

A detailed list of the services follows hereafter.

## Executive Well Man screening (General Check-up Males by resident medical doctor)

- Physical Examination
- General Blood Investigations
- Chest X Ray
- Peak Meter Reading (lungs)
- Resting ECG/Stress ECG
- Detailed Medical reports with results and doctor's recommendations

Total Price excluding Stress ECG = Lm100 Price less 20% discount = Lm80

Total Price including Stress ECG = Lm 150 Price less 25% discount = Lm112

## Executive Well Woman screening (General Check-up Females by resident medical doctor)

- Physical Examination
- General Blood Investigations
- Mammogram
- Ultrasound pelvis
- Smear Test
- Detailed Medical reports with results and doctor's recommendations

Lm110=Total Price including smear test
Price less 20% discount = Lm84
Lm95=Total Price excluding smear test
Price less 20% discount = Lm76
Lm65=Total Price excluding smear & ultrasound Price less 10% discount = Lm58

#### Bone density

Price = Lm55
Price less 20% discount = Lm45

### Heart Scan (non-invasive screening of the heart)

Price = Lm80
Price less 20% discount = Lm 64

#### **Lung Scan Screening**

Price = Lm80
Price less 20% discount = Lm 64

If both Heart and Lung Scan are done for groups of 4, a special price of Lm120 is to be applied.

#### Saint James Hospital Eye Clinic

 Eye Laser Treatment/Surgery (short sightedness, long sightedness, astigmatism)

LASEK Price = Lm 195 per eye (hospital fee) Price less 10% = Lm175.50

#### **Cosmetic Dermatology Clinic**

- Free Consultation and Test Patch for Laser Hair Removal
- Free Transforma Loyalty Card to all The Dental Association members
- 10% discount on all cosmetic services (clinic fees)
- Endermologie Cellulite Treatment (14 sessions) 10% Dental Association members discount on package price

Some of the services include:

- Botox injections
- Thread vein laser
- Hair removal laser
- Endermologie
- Dermal fillers
- Lip augmentation
- Dermatology Consultations
- Facial rejuvenation programme and chemical peel

#### Hospital fees

- 10% discount on hospital fees with regards to Laser Hair Removal procedures done at St James Hospital Zabbar
- 10% discount on all Medical Services offered at St James Hospital – Gozo

 Saint James Hospital could offer a onehour health education seminar covering various topics like smoking cessation etc at the Dental Association of Malta's headquarters, once a month.

### ALL PRICES ARE SUBJECT TO FLUCTUATION

Dr. David Muscat
PRO Dental Association of Malta
The Professional Centre
Sliema Road, Gzira

Mr. Jean Claude Muscat
Hospital Director
Saint James Hospital Group
George Borg Olivier Street, Sliema

The Saint James Hospital Group is Malta's leading healthcare provider with its services being offered from its convenient locations all over the island as stated hereunder:

Contact: Josette Agius Saint James (Capua) Hospital George Borg Olivier Street Sliema, SLM12 Tel: 21335235 info@stjameshospital.com

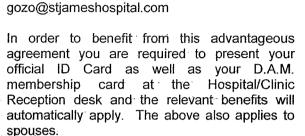
Contact: Rosanne Buttigieg/Yvette Cassar Saint James Hospital No 65, St James Square Zabbar, ZBR05 Tel: 21692055 info@stjameshospital.com

Contact: Tanya Costa Sliema Eye Clinic George Borg Olivier Street Sliema Tel: 21320666 eyes@stjameshospital.com

Contact: Henry Camenzuli Mosta Outpatient Clinic No 9, Tat-Targa Pharmacy Constitution Street Mosta Tel: 21433146 mosta@stjameshospital.com

Contact: Dorianne Bondin Transforma (Cosmetic Dermatology Clinic) Myan Road Attard Tel: 21423838 transforma@stjameshospital.com

Contact: Dr Pat Sciberras Saint James Hospital (Gozo) Triq il-Hafur Ghajnsielem Gozo Tel: 21564781



This agreement will come into effect from the 1<sup>st</sup> June 2005 for a 12-month period, which will be automatically renewed every year, unless stated otherwise.

#### PRESIDENT'S CORNER

The Dental Association is the only association representing the dental profession in Malta. Our association is neither a legislative nor a regulating body. However thanks to our representation, hard work and commitment towards our profession, we achieve befitting results. During the month of May we have seen such results on two important issues being tackled by our association.

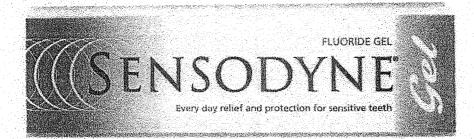
The letter from the Hon. Minister of Health confirming an amendment to the Health Law regulating dental practice, as proposed by the Dental Association. (Details of this letter may be found in this issue of the Probe)

The Dental Technicians Association had a general meeting in order to discuss their registration with the MSA following our publication on the legal requirements of Custom Made Devices. (As can be found in the previous issue of the Probe)

In this issue of The Probe we are also including Guidelines on Infection Control.

Dr. Martha Vella

# MILLIONS TRUST IT!

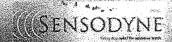


# ENTISTS RECOMMEND

THE WORLD'S LEADING TOOTHPASTE FOR SENSITIVE TEETH



((SENSODYNE







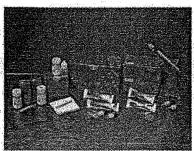








Posterior fillings
Paediatric dentistry
Geriatric dentistry
Base material
Core build-up
Temporary filling



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Shades: A2, A3, B3; volume of mixed material per capsule: 0.12 ml.

(GC Fuji IX GP original is also available in a powder/liquid version)

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CONTACT PERSON:- Ms. Elisa Camilleri

### AMENDMENT TO HEALTH CARE PROFESSIONS ACT

I refer to your letter dated 28 March, 2005 in connection with the above subject. Attached please find the proposed amendment to article 29 of the health care professions act as discussed at our meeting

Signed, L Deguara, Minister of Health, Elderly and Community Care

Article 29

After sub article (1) insert a proviso:

Provided that a registered dentist shall be entitled to practice in all fields of dentistry provided he holds a license issued for that purpose by the President of Malta and his name is entered into Council's Principal Register of Dental Surgeons.

Artikolu 29

Wara is-sub-artikolu (1) għandu jidħol il-proviso li ġej:

Iżda dentist reģistrat jista jipprattika fil-qasam kollu tad-dentistrija sakemm ikollu ličenzja maħruġa mill-President ta` Malta għal dak l-iskop u ismu jkun imniżżel fir-Reġistru Principali tal-Kirurġi Dental tal-Kunsill.

#### GUIDELINES TO INFECTION CONTROL PROCEDURES IN DENTAL PRACTICE

Implementing safe and realistic infection control procedures requires a well equipped dental surgery as well as the full compliance of a trained dental team.

The medical history and examination may not identify asymptomatic carriers of infectious disease and universal precautions must be adopted. This means that the same infection control procedures must be used for all patients.

The layout of the surgery, which should be simple and uncluttered, is an important aspect of infection control. Clean and dirty areas within the surgery should be clearly defined and where possible, instruments should be decontaminated away from the surgery in a sterilisation room.

The floor covering, equipment and work surfaces should be smooth (ideally seam free), impervious and easy to clean and disinfect.

Dental Unit water lines (DUWL) are to be fitted with antiretraction valves. In order to reduce contamination of dental unit water supply a self contained 1-2L bottle water source or integrated continuous water disinfection are to be used. Non toxic disinfectants introduced into a bottled water supply will reduce the microbial load of the biofilm. DUWL should be run for 20 secs before use.

Used instruments are often heavily contaminated with blood and saliva and must be completely cleaned before sterilisation.

Instruments can be cleaned by hand, in an ultrasonic bath or thermodisinfector.

A recommended method of sterilising dental instruments is **autoclaving**.

Sterilisation should be performed at the highest temperature compatible with the instruments in the load. For dental instruments and equipment, autoclaves should reach a temperature of 134-137°C for three minutes.

New autoclaves should be connected to a printer, data logger or PC to allow the parameters reached during the sterilisation cycle to be recorded for routine monitoring. Ultra violet light, boiling water and chemical baths are not

recommended for sterilising dental instruments and equipment.

Effective sterilisation depends on steam condensing on all surfaces of the instruments in the load to be autoclaved, so it is essential that instruments be placed to allow free circulation of steam; the autoclave chamber must not be overloaded.

The sterilisation process is impaired or prevented by air remaining in the chamber or trapped in the load items. Air is removed from the autoclave chamber by either being displaced downwards by steam or by evacuating the air to create a vacuum before steam is introduced into the chamber. For many years, downward displacement autoclaves were the only autoclaves used in a dental surgery; they are still considered an acceptable means of sterilising dental instruments equipment. More recently, however, vacuum-phase autoclaves have become available.

Dental surgeons should obtain documented assurance from the manufacturer confirming that autoclave is capable of sterilising the size and nature of load items to be processed within the practice. documentation should be compliant with the relevant classification of autoclaves as described in prEN13060.

Vacuum autoclaves should be equipped only with cycles providing a presterilisation vacuum stage to minimise the possibility of an incorrect cycle being selected — and a consequent failure to sterilise the load.

Processing wrapped instruments in a conventional downward displacement autoclave may result in inadequate air removal and failure to sterilise. Wrapped

instruments and instruments in pouches must be sterilised using a vacuum-phase autoclave.

There continues to be some debate about the effective decontamination of handpieces. In theory, a vacuum-phase autoclave will remove the air from the lumen of a dental handpiece, allowing steam to penetrate. The presence of lubricating oil as well as the particularly narrow lumen however, may compromise the sterilisation process.

Processing in a certified downward displacement autoclave may be acceptable but not recommended. Current recommendations point towards the proper cleaning and disinfection of handpieces with proprietary cleaners available.

Successful sterilisation depends on the consistent reproducibility of sterilising conditions:

- Autoclaves must be validated before use and maintained according to manufacturer instructions. The door seal is to be checked weekly in order to eliminate the possibility of air leakage. Water reservoirs are to be emptied and refilled frequently so as to minimise bacterial colonisation as well as the accumulation of endotoxins. Valves and filters are to be checked and cleaned at least every 3 months.
- Annually all autoclaves need to be tested and certified by a competent engineer.
- Correct operation of all autoclaves must be checked whenever the autoclave is in use by recording the readings on the panel-this is facilitated if the sterilizer equipped with a printer provides a permanent record of

temperature, pressure and elapsed time during cycles. The readings should be compared with the recommended values – if any reading is outside its specified limits, the sterilisation cycle must be regarded as unsatisfactory, irrespective of the results obtained from chemical indicators, and the autoclave cycle checked again. Autoclaves fitted with automatic control and alarm systems save on checking time.

• In the case of vacuum type autoclaves a steam penetration test relevant to the loads to be processed, is also to be carried out and recorded daily in order to test the efficiency of the evacuation of air from the sterilizer.

Autoclave logs and printouts are important documents to be retained as they provide the maintenance and performance history of the steriliser and could prove useful as evidence in the event of an adverse incident or litigation.

Chemical and biological indicators do not demonstrate sterility of the load. Chemical indicators serve only to distinguish loads that have been processed in an autoclave from those that have not. Biological indicators are of limited value in moist heat sterilisation and can only be regarded as additional to the measurement of physical parameters.

Sterilised instruments are to be stored in dry, covered conditions i.e. trays with lids or under bactericidal lamps.

All instruments should be sterilised before

and after being sent for servicing and repair.

A statement confirming sterilisation must accompany the equipment sent for servicing.

Impressions and dental devices are to be cleaned and disinfected by immersion in an approved disinfectant before being sent to the laboratory as well as before fitting in the patient's mouth. Confirmation of disinfection is to be included in the prescription accompanying laboratory dispatch.

of dental units Surfaces must impervious they as may become contaminated with potentially infective material. When selecting equipment, consider the ease with which the surfaces can be cleaned and disinfected. Check with the manufacturer that the surfaces are resistant to common disinfectants. The manufacturer may recommend the use of a particular disinfectant; ensure that it will destroy or deactivate all viruses, bacteria and fungi.

A strict system of zoning aids and simplifies the decontamination process. In practice, this means defining the which will become contaminated during operative procedures; only these areas need to be cleaned and disinfected between patients. A surgery can, as a result, be cleaned rapidly. In addition, between clinical sessions, all work surfaces. including those apparently uncontaminated, should be thoroughly cleaned and disinfected.

Effective surface decontamination is a two-stage process of cleaning and disinfection to reduce the microbial load to a minimum – clear the work surface of instruments, materials, patients' notes etc ...cleaning is achieved by applying a

detergent liquid to the surface and physically wiping the area with a generous application of elbow grease! The surface can then be disinfected with a disinfectant that will destroy or deactivate all microbes. Disinfectant solutions must be made up and used according to the manufacturer's instructions

All aspirators, drains and spittoons should be cleaned after every session with a surfactant non-foaming disinfectant. Portable aspirators with reservoir bottles are to be fitted with filters, taking particular precautions when disposing of the hazardous contents.

Blood spillage should be dealt with as soon as possible. The spillage is to be covered with disposable towels, which are then treated for 5 minutes with 10000ppm sodium hypochlorite solution or sodium dichloroisocyanurate granules, before being cleared up and disposed of as clinical waste.

Sharps are to be handled with care, and disposed of in an approved puncture-proof container. Local anaesthetic cartridges, when partially discharged (hazardous) or fractured must be disposed of separately. Sharps containers should be disposed of when no more than two-thirds full. Clinical waste and sharps waste must be stored securely before collection for final disposal usually by high temperature incineration.

The principal dental surgeon has a duty of care towards employees to provide a safe place of work. It is not sufficient simply to provide personal protective equipment (PPE) such as gloves face masks and glasses; the employer must ensure that it is being used in the correct manner. It is important that all staff understand the principles of personal protection and that compliance is part of their contracts of employment.

All clinical staff should be vaccinated against the common illnesses. All those involved in clinical procedures must be vaccinated against hepatitis B.

The care of hands is vital to infection control; lacerated, abraded and cracked skin can offer a portal of entry for microorganisms. Gloves must be worn for all clinical procedures and treated as single use items so a new pair of gloves must be used for each patient. Gloves should be donned immediately before contact with the patient or infected material or equipment and removed as soon as clinical treatment is complete. In order to eliminate confusion it is recommended to strictly prohibit gloved handling of non infected areas such as door and cupboard handles, computers and stationary...

Recommendations for hand care during clinical sessions include - removal of rings, jewellery and watch-covering all cuts and abrasions with waterproof adhesive dressings -methodical handwashing using a preferably quality liquid soap good containing a disinfectant - a full handwash and thorough drying is recommended before donning gloves -removing gloves and washing hands after each patient (gives the hands time to recover from being covered)regular use of an emollient hand cream to prevent the skin from drying, especially after every clinical session.

Operators and close support clinical staff must protect their eyes against foreign bodies, splatter and aerosols that may arise during operative dentistry, especially during scaling (manual and ultrasonic), the use of rotary instruments, cutting and use of wires and the cleaning of instruments. Ideally, protective glasses should have side protection. Many modern prescription glasses have small lenses, which would make them unsuitable for use as eye

protection.

Masks do not confer complete microbiological protection but they do stop splatter from contaminating the face. Masks or visors are recommended for all operative procedures and should be changed after every patient, not pulled down or re-used.

A wide variety of clothing is worn in dental surgeries and in many practices is used to reinforce the corporate image. There is no consensus view on whether surgery clothing should have short or long sleeves. Short sleeves will allow the forearms to be washed as part of the hand washing routine. Long sleeved coats or tunics will protect the skin of the arms against splatter. Long sleeves, however, are more likely to become contaminated during clinical sessions and could cause a breach in infection control. Surgery clothing should be made of a material that can be machinewashed with a suitable detergent at a temperature of 65°C to eradicate any potential microbial contamination. Shoes should be non slip and well cover the upper part of the foot.

Each practice must have a written infection control policy. The policy should describe the practice policy for all aspects of infection control and provide a useful guide to the training necessary for each member of staff to be competent and confident in its implementation. All members of the dental team must know who is responsible for ensuring certain activities are carried out and to whom to report any accidents or incidents. Accidents and incidents should always be recorded in the accident book.

Although a policy will describe the procedure for the practice as a whole, it is useful for each member of staff to receive a copy and to sign a declaration to confirm that the policy has been received and

training provided. A copy of the policy should be displayed in each surgery.

These guidelines have been compiled by Dr. Martha Vella on behalf of **DAM**.

Suggested sources for further information BDA advice sheet A12 MDA bulletin MDA DB2002(06)

#### SCALING NEW HEIGHTS (or CONFESSIONS OF A DEMENTED DENTIST)

In 1848 a German missionary, Johann Rebmann, returned from Equatorial Africa with a report of a sighting of an unheard of phenomenon – a mountain, in the hottest place on earth, capped with ice. No one believed him for years, until a number of other reports trickled in, all verifying the same sighting.

In 1861, the first expedition set out from Europe with the aim of climbing this mountain. They failed ... and they kept failing, driven back by altitude sickness, Arctic temperatures, random blizzards and sheer exhaustion. In fact, it was not until 1889 that the summit of Mount Kilimanjaro was finally reached.

In 2004, on a perfectly ordinary day at work, an old friend of mine whom I hadn't seen for some while, Laurie Pace, turned up for a perfectly ordinary checkup and, in the course of casual conversation, remarked about her upcoming venture — an all-Maltese expedition to the summit of Mount Kilimanjaro, the Rooftop of Africa.

From that moment on, the die was cast. I had never done anything remotely like this in my life before but, after three days of brooding, introspective deliberation, the

uniqueness of the experience combined with the photographic allure proved irresistible. I was in - mind, body and soul.

As I met with Keith Marshall, the team leader, for the first time I learnt that the entire venture was actually the focus of a fund-raising stunt, organized by Reaching Out group on behalf of Fr. George Grima's efforts to raise Lm 40,000 for his latest life-saving project in Ethiopia <sup>1</sup>. I also began to realize that this was going to be no mean feat, requiring an enormous amount of preparation and effort if we were to stand any chance of success. What I didn't realize at the time was that the entire operation was eventually going to engender so much publicity that failure wasn't an option.

The next six months whirled by in a dizzy haze of daily running sessions up the hills and down the dales of Bidnija, 5.00 AM starts to 40 km weekend hikes around Malta. 4-hour midweek rock-climbing sessions, 48-hour hikes around Gozo, 2-day trips up and down Etna and then - like the Grand Old Duke - up and down again, endless weekly meetings, publicity events, television appearances and gear-purchasing trips. And the oddest aspect of it all was that I enjoyed every minute of it - I was working on funds for raising something truly worthwhile, I was preparing for what would probably be my single greatest adventure ever ... and I was gefting into the best shape of my life!

We left Malta on Thursday 13<sup>th</sup> January, flying via Tripoli and Dubai to Nairobi and thence on to Tanzania. The final leg of the trip, from Kenya to Tanzania, presents the first glimmer of realization of the enormity of the job ahead. Kilimanjaro is one of the Big Seven i.e. the individually highest peaks on each of the seven continents. Africa's contender ranks number three in this unique list. Everest, in Asia, is, of course, the clear leader but McKinley, in Alaska, only just

scrapes in ahead of Kilimanjaro. This does not, by any means, make Kilimanjaro the world's third highest mountain enjoying, as it does, the title of the world's highest free-standing mountain makes it the most visually impressive of the lot. Everest, for instance, is surrounded by several other crags many of which are not much shorter than itself, thereby undermining the relative awesomeness of its' intrinsic vital statistics. Kilimaniaro has no such detractors and stands supreme, a mighty, looming cone that brooks no competitors, towering above a plain of immeasurable dimensions. soaring through the clouds disappearing into the icy wastes of the sky above.

Base HO was the Marangu Hotel, an oasis of bungalows and good cheer at the foot of Kilimaniaro National Park. Briefing and kit inspection took place on Saturday afternoon and on Sunday we met with the guides and porters who would lead, carry, coax, threaten and cajole us on our way. A brief, dusty journey in two large, ex-army Mercedes trucks saw us to the Park entrance at Machame Gate, the starting point of our expedition. Gawdens (no Maltese ancestry) was our chief guide and he made it clear that we would be sticking to the rules on this trip, of which the most pertinent was 'start off at the pace at which you will finish'.

Perhaps the most unique aspect of this phenomenon of Nature is the fact that the journey from bottom to top, in terms of the geographical zones crossed during the undertaking, is the equivalent of a trek from the equator to the South Pole traveling upwards. Five zones encircle the mountain, in belts of around 1000m apiece, each with its' own climate, plant and animal life. The higher you go, the colder it gets and the lower the rainfall, limiting the of and species demanding remarkable adaptations for survival. Thus,

you enter the lush Rain Forest from the Lower Slopes, working up to Heath and Moorland at about 3000m, on to high Alpine Desert at 4000m and hitting the Polar Zone for the last 1000m on to Uhuru Point, and victory, at the dizzy height of 5985m.

The first sensation of the Rain Forest is the oppressive humidity. Sweat is generated in bucketloads but, rather than evaporate, it simply runs the course of your entire body to drip in great fat globules off your extremities. A moment later, you are reminded wherein the rain forest derived its' name as a torrential downpour cracks through the seemingly impenetrable canopy of overhead greenery. A mad scramble for the carefully stowed rainwear ensues, until you emerge, suitably cloaked, impervious to the floods of water on the outside, drowning in the suffocating heat within. This cheerful little scenario is re-enacted at frequent intervals throughout the day until, some eight or nine hours later, you are greeted by the glorious sight of a group of little coloured dots in the distance, those being tents denoting the end-of-day campsite. The tents are set up by the porters who work harder than anyone else in the team, scurrying along ahead of the pack to prepare the camp for the arrival of the trekkers and their guides at the end of the day. This is Machame Camp, at 3000m. The Forest has more-or-less fizzled out by this stage and the terrain is primarily rock and scrubland. A feeling of exultation at the success of the day pervades the atmosphere, heightened by the prospect of some hot food, dampened only by the absence of any possibility of a much-needed shower. The paucity of washing facilities is one of the more dismaying features of a venture of this kind, particularly to anyone blessed with superior olfactory capabilities, but it is surprising how quickly one forgets about this growing unpleasantness in the face of the greater ardours that still lay ahead.

I don't think one really sleeps on a trip like this. Certainly, I didn't. The bag and tent were adequate enough but Machame, it must be remembered, was created as a slope not a campsite. Consequently, I found that I was sliding down across the floor of my tent, ending in a crumpled heap at the entrance, and having to push myself back up to the starting position, at a frequency of about a cycle every ten minutes. My tent mate, Marco Cremona — sive 'Tiggy'-didn't seem to be doing much better either. As I had occasion to remark the following morning, I didn't sleep much but I got in a good, if unscheduled, workout.

Arguably the vilest aspect of the entire operation were the toilet arrangements. Unsurprisingly, the huts provided for this purpose consisted of no more than four shabby, wooden walls enclosing a hole in the ground, about one foot in diameter, above a large purpose-built pit within which, presumably, lay the festering remains of the various deposits left behind by previous conquerors. At least, this is what the permanent stench suggested and I never came across any evidence to suggest otherwise. Interestingly, these otherwise less-than-inspiring fabrications led to a striking example of the pricelessness of experience. Acting on the advice of one of our guides, I quickly learnt that the ideal time to avail myself of these dubious facilities was very early in the morning. The first reason was simple enough – the earlier you visited, the less people had just been before you and, therefore, the less fresh deposits lay waiting to greet you. The second reason was more esoteric still - if you got there early enough, the stuff was still frozen over from the night before and not yet disposed to give voice to the symphony of odours that was its' wont throughout the rest of the day.

After an early breakfast, we set off toward the Shira plateau. Leaving the forest behind

completely, we headed up into the moorland along a ridge of volcanic rock. You become more aware of the heat on this, the second day and the skinny, naked trees at this altitude provide little shade. The day starts as it goes on, a steep northward climb through forests of stunted, twisted trees bare of vegetation and blackened by fire. The first rock climbs present themselves, outcrops varying from 20 - 80m in height but with plenty of hand and foot holds available. Air thinness hadn't really begun to manifest itself vet but I was starting to feel the additional weight I was carrying. Having designated the group's 'official' photographer, I had an estimated 4-6 extra kilos on me at all times and I was becoming increasingly appreciative, as the hours wore on, of the difference they made. Eventually, however, the spirit-lifting little spots of colour hove into view. We had reached the Shira plateau at 3800m. Kilimanjaro is actually three craters, of which Shira is the oldest. Our ultimate target was the peak of Kibo crater but this lay temporarily out of view. Instead, we were now enclosed by the Shira Cathedral and Klute Peak to the East and South respectively and Mount Meru in the far distant West.

Day three was scheduled to be simply an extra day of acclimatization, in anticipation of the 2000m altitude gain we would experience in the next-few days. The greatest danger at these heights is Acute Mountain Sickness or Altitude Sickness, brought on by decreasing oxygen levels and the body's ability, or otherwise, to adapt sufficiently to it. It is unpredictable and appears to bear little direct relationship to an individual's level of fitness or previous experience. It is, in fact, the 'Wild Card' in any such expedition and all sixteen of us accepted the fact that any of us may be struck by it and forced to turn back, however dismaying the prospect. In its' mildest form, it presents with light nausea, vomiting, dizziness and, especially, headache. The headache

is, reputedly, the worst form known, surpassing even migraine in intensity. Most of us experienced some measure of this but mostly it cleared up after a few hours. It can progress, however, to more serious illness with accompanying ataxia and mental confusion. At this stage, it is essential to turn back and go down to higher oxygen levels as fast as possible, before the onset of pulmonary or, worse, cerebral oedema and often fatal consequences.

Thus, for the best part of this day we hiked around generally, taking in various sights and viewpoints along the way but generally moving in a large circle without gaining any new altitude.

Day 4 took us up 4530m, to accompanied by a chorus of headaches. It progressed with a steady gentle ascent towards the western slopes of Kibo through the dry, boulder-strewn terrain of the Shira plateau. We were climbing through cloud for most of the time and mist enveloped us regularly. By now, the giant Senecias and Lobelias, beautiful cactus-like trees for which Kili is famous, had put in their appearance. They came at us like shadows from the mist, appearing and disappearing at random, ghostly sentinels watching our every move.

By the afternoon, though, vegetation had deteriorated to such an extent that only a few lichens remained, clinging to life in an increasingly hostile environment.

The path, however, then turned downhill all the way to our rest point in the stupendous Barranco Valley at 3950m. Barranco comes upon you suddenly as you descend, within an accompanying cradle of densely clustered Senecias, into what appears to be an enormous natural bay, only to realize that what looked like

seawater from afar is, in fact, cloud. To the left, the Southern Icefelds loom ominously and, for the first time, the Rebmann glacier comes into view.

Day 5 began with the spectacular Barranco Wall – a 300m vertical rockface that had to be scaled first thing after breakfast, a slow, hand over hand, foot by foot, scramble with strict instructions to never look down. A steady ascent, broken only by the occasional rockfall, up to the 40-cm ridge halfway up, hugging the rockface like spiders and on again to the summit of the Karanga plateau... and rest.

Two hours later, we reached the Karanga valley, at the foot of Kibo. The end of the fifth day.

By now, it was getting seriously cold at night and you only left your tent under extreme duress. Unfortunately, one such emergency that refused to be ignored occurred to me that night. Nonetheless, the view that met my eyes on my stumbling return to the tent put all grumbling thought of such inconveniences right out of my head. It was about 1.00 AM, perfectly still and unsurpassingly clear. The moon had risen high and was lighting up the glaciers of Kibo in pools of glowing radiance. Kibo itself remained largely silhouetted against a backdrop of uncountable stars, etched with a sharpness that only the total absence of any form of light pollution could ever hope to achieve. I had, before setting out on this climb, been advised to leave my tripod behind, its' weight having brought me over the allowed limit. I had only reluctantly agreed, with a gloomy foreboding of missed opportunities - and my worst anticipations were realized that night. The shot of Kibo would have been the defining image of the entire adventure, and there was no way to do it without a rock steady tripod.

No half-baked, shaky image would do for a perspective like this — and I just stared, absorbing the immense glory of the scene, sick to my guts at being helplessly unable to record it, and slowly freezing over!

On Day 6 we crossed the Alpine Desert, through ever more barren scenery. between boulders, over the shattered rocks and stones of a misty mountain ridge. Even the trail was now faint. The temperature here alternates between the merciless heat of open desert and the cloying humidity of high-level clouds sweeping in and overaus. A final scramble over a relatively short rock face brought us to Barafu Camp at 4600m, where our tents were pitched precariously over bleached rocks and massive mounds of volcanic gravel. Vegetation had long disappeared, a blisteringly hot wind blew through the flapping tent doors and the only life forms present were vultures circling overhead, rats scrabbling within the shade of the larger rocks ... and us.

We had now reached the launch pad to our target. From here, we would make the attempt to reach the 6000m peak of Uhuru Point, the highest in Africa. Ahead lay a single vertical ascent of nearly 1400m, a gradient that had, in icier days, defied the efforts of climbers for 18 years, oxygen pressure ca 40% ground level and anything else the giant may choose to treat us to. For a variety of reasons, we were scheduled to set off at midnight. To begin with, UV levels are ferocious at this height and it's better to hit the top and begin a rapid descent as near to daybreak as possible. A lot of the terrain we were about to cover consisted of deep layers of scree, a kind of volcanic gravel, and the sheer gradient made this material nearly impossible to climb through except when it was semi-frozen at night. And finally, as I was told by one of our guides, having taken all this trouble to reach the top, we

may as well aim to arrive at sunrise and enjoy the view!

At midnight, several sleepless hours later, we assembled. The wind had picked up considerably during the night and now cloaked our huddled forms in a howling blackness, broken only by the little points of light from our head torches. The signal was given and we shuffled on, past the exceptionally large boulder that provided relative shelter throughout the evening, into a surreal landscape of dimly perceived rocky ridges and the endless cacophony of the bitter wind, under the brooding presence of Kibo's mighty silhouette. The mercury had settled at about -20F by the time we set out, but it was now dropping fast again.

After about three hours of this struggle, I was beginning to experience an increasing sense of hopelessness to it all. We were gaining altitude far too slowly, the cold was working its way through and the cameras and lenses felt like so much lead weight on my back. Worse still, a profound fatigue was emanating from deep, deep within — a fatigue born of sleeplessness, exertion and, above all else, cold.

And then the blizzard struck! The wind lulled briefly, gathering its resources, before descending in a mighty gust from high above. It screamed demonically through the blackness, thrusting a dense wall of frozen scree before it, intent on hurling us back to where we came from.

Apparently, this phenomenon was totally unexpected. The guides hadn't seen anything like it for several years and were, at times, clearly uncertain as to what we should do. The route behind us was sealed off and stopping where we were was out of the question. The only available way out of there was ever further up the mountain face and down a different route.

By this stage. I was utterly lost in a private world of noise, cold and, especially, an irresistible demand for sleep that flew in the face of all reason. I felt like I had been heavily drugged, unable to think beyond the need to lie down and close my eyes, oblivious to anyone else out there. Every step required a massive effort from reserves that had long been exhausted. My unarguable memory of the entire episode is that of Steve, the guide who stuck to me throughout every moment of the nightmare, alternately encouraging and threatening, and to whom I remain eternally grateful.

The following hours spent themselves in a blurry haze of which I have no genuine recollection .. until the most glorious moment of the entire event. At about 6.00 AM, the sun rose! What an indescribably wonderful thing light is, bringing with it vision, warmth and hope. Crags and plains wove into view and, with it all, a suggestion that there may yet be a positive outcome to all this.

Stella Point, 100m short of our target, was sighted and reached in a final, slow scramble. I collapsed onto the heap of other bodies scattered around in various stages of exhaustion and would quite happily have lain there forever, had it not been for the chief guide prodding me, querying whether it was my intention to carry on to Uhuru Point itself. In all probability, I don't think I would have, had it not been for my flash recollection of a minor event upon which hinge so many of life's great turning points. I remembered that, shortly before leaving Malta, my ten year-old daughter had proudly presented me with a flag of our home village -Bidnija – personally stitched together by herself and that I had solemnly

promised to bring back a picture of it flapping over the roof of all Africa. Without this, I sincerely doubt whether I would have found the wherewithal for this last leg of the journey. Such, however, are the impositions thrust upon us by greater authorities and, two stumbling, crawling hours later I did, indeed, find myself at Uhuru, 5985m above sea level, the Heimann glacier ahead, the Rebmann glacier to the east, and the shimmering plains of Africa stretching away into infinity below.

Ultra violet really is a problem up there and we were hustled back with almost indecent haste, across the one and a half mile volcanic caldera. Glaciers, succumbing slowly to the artificiallyinduced heat generation of an uncaring humanity, lined our retreat to Stella. The descent of Kilimaniaro is markedly different to the ascent. The same deep deposits of volcanic scree that create so many problems on the way up, provide a relatively rapid way down. In part-running, part-skiing fashion, it is possible to almost glide all the way down to Barafu in very little time, albeit in a chokingly permanent dust-cloud. respite there is only, however, very brief, and then begins a rapid but intense 6-7 hour trek to Mweka camp, at 3000m. By the time you reach Mweka, in the late evening, you have not slept a wink for nearly 48 hours, during which time you have climbed to Barafu, lain awake for the entire evening, faced death on the Snows of Kilimaniaro, struggled on to Uhuru, scrambled another vertical 1400m back down to Barafu, then spent the rest of the further 1600m to base. day descending a It really is time to eat and crash out.

From Mweka to the exit point at Machame, on Day 8, was a relatively leisurely 3-hour trek through bright, dry rain forest. We reached the gate about lunchtime and were

transported back to the Marangu Hotel, a weary, smelly, dusty, ragged crowd, a motley bunch of assorted individuals with but one thing in common – we had been to the top of Africa ... and returned.

The aim of this project is the construction of an orphanage and school for 250 Ethiopian children. At the time of writing, 'Reaching Out' have collected about Lm 35,000 of our Lm 38,000 target. Should any reader of this article feel inspired to make a personal contribution, please either send a cheque to myself, Ivan Padovani, at 'Majjistral', Ras il-Wied, Bidnija MST 13 or deposit it directly into HSBC account number 039051974050 — Reaching Out Kilimanjaro Fund. It goes without saying that any contribution is most greatly appreciated.

### Starting a new dental clinic - First steps

The latest edition of the Access for All (Design Guidelines) published by the National Commission Persons with Disability (KNPD) states that "the question of providing access for all buildings has deeper significance than merely providing means to negotiate physical barriers". It continues by stating that "new buildings should be designed in such a way that physical barriers should not exist in such a way as a matter of course. This requires a new mentality towards design of buildings ...".

Keeping the above in mind and mindful of the responsibility of KNPD to ensure the implementation of the provisions laid out in the Equal Opportunities (Persons with Disability) Act of 2000, we dental practitioners have to ensure that our clinics are constructed in such a way as to conform to the MEPA regulations as listed in PA 3/99. Therefore accessibility obligations are among the first requirements we have to fulfil in order to run a successful dental clinic.

Before embarking on the lengthy, laborious and costly exercise of constructing our dental surgery, we should begin by asking the right questions to ourselves, to our architects. Such questions should be based on a careful perusal of the Design Guidelines, so that, in this way, we can avoid making costly and heart breaking mistakes.

The questions we should ask ourselves are:

i. Is the external environment and the approach to the building accessible?

ii. Is the entrance level with the street and the entrance wide enough?

iii. Is the interior accessible or if not, can it be made to conform to existing regulations by means of changes?

It is ridiculous to have a clinic which conforms to questions ii. and iii. Whilst it is situated in Steps Street (sic) or the entrance to the building is on a pavement which has no ramp or access.

I have often heard colleagues who find these rules are draconian declare that they will only treat 'ablebodied' clients in their surgery. However, they, and we, must understand that we are now living in the 21<sup>st</sup> century, in a world where discrimination of any description cannot be tolerated.

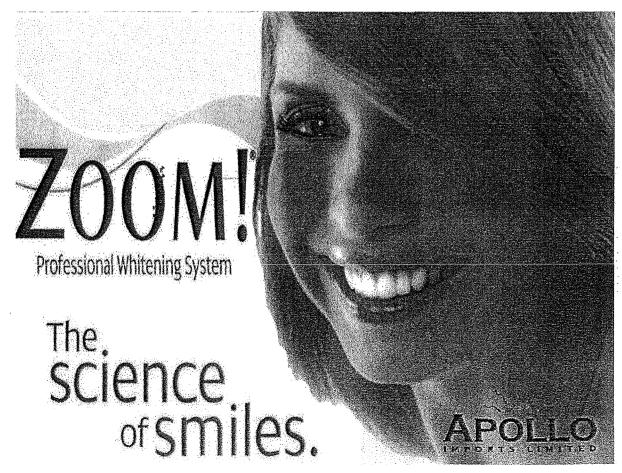
Accessible premises equal good design and are a pleasure to use not only by the client, but also by the dental professional. Accessible premises are good for business, as they attract a wider spectrum of clientele. You only have to remember that accessibility caters not only for disabled people, but also for elderly persons, pregnant women and people with temporary impairments.

It isn't difficult to plan ahead and to make sure that your new premises, or any major modification to existing premises, are accessible and conform to MEPA regulations PA 3/99.

As a first step, try accessing these websites and downloading relevant guidelines and information:

- · http://www.mepa.org.mt/
- · http://www.knpd.org/

Dr. Anthony Charles BChD Vice-chairman KNPD



## Dentists The First to Transplant an Organ.

Up to the start of the 19<sup>th</sup> century the main treatment for tooth decay and periodontal disease was extraction. Some of the more advanced dentists tried to replace missing teeth but the procedure was extremely labour intensive and not comfortable for the patient. Accurate impressions were not available and the replacement tooth was carved out of ivory to mimic, as much as possible, the shape and size of the missing tooth. These were then secured to adjacent teeth with wire.

To overcome these problems dentists attempted to transplant teeth from one person to another – these were the first human organ transplants. Many of these were performed in the mid to late 18<sup>th</sup> century. In 1728, Fauchard wrote about transplantation in his book *The Surgeon Dentist*:

• It is not all that fabulous to speak of successful transplanting of a tooth from one mouth to another...We see it in our daily experience that teeth transferred from the jaw of one person into that of another grow fast and remain firm and without change and fully perform all the requirements...The operation has so frequently been successful that I am surprised that some practitioners should pronounce it impossible

John Hunter, an English surgeon, devoted a whole chapter of his book (Natural History of Human Teeth 1771) to transplantation.

He commented that young healthy donors should be used because "the principle of

life and union is so much stronger in such than in old ones".

Tooth donors were usually poor people responding to advertisements in the newspapers. In the late 18<sup>th</sup> century, a New York paper offered people four guineas (approx US\$ 70 in today's value) for every tooth. The advertisement read as follows:

Teeth – any person willing to dispose of his front teeth may hear of a purchaser by applying to Number 28 Maiden Lane, for which a generous price will be given.

The dentist would examine both the donor and recipient. The bad tooth was extracted and the socket inspected for size. The dentist then turned his attention to the donor and extracted the tooth best suited for the job. This was inserted into the socket and stabilised with gold wire. The purchaser was given a mirror to admire his new tooth whilst the donor was sent away toothless but with cash in hand.

This procedure became unpopular and eventually died out due to various reasons including cross infection (mainly syphilis), poor aesthetics and ultimate failure after some months.

In 1806, Joseph Fox, an English dentist wrote that "the lymph system and some component of blood" were responsible for resorption of the transplanted tooth.

A double first for dentistry – organ transplantation as well as transplant rejection!

Mark S Diacono
Dental & Implantology Unit,
St James Hospital, Sliema

#### THE PERILS OF WARFARIN IN DENTISTRY

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

Warfarin is an anticoagulant, whose main indication is deep vein thrombosis.

Other indications are pulmonary embolism; patients with atrial fibrillation who are at risk of embolisation; patients with mechanical prosthetic heart valves to prevent emboli developing on the valves. Warfarin is also used to prevent transient ischaemic attacks.

Warfarin takes at least 48 to 72 hours for the anticoagulant effect to develop. It antagonises the effects of Vitamin K.

The INR (international normalised ratio) is used to denote the prothrombin time. INR's that are ecommended are:-

- 2.2.5 deep vein thrombosis
- 2.5 DVT and Pulmonary Embolism, Atrial fibrillation, Rheumatic Mitral disease
- 3.5 DVT, PE, Mechanical prosthetic heart valves

Haemorrhage is the main adverse effect. Other side effects include hypersensitivity, rash, alopecia, diarrhoea, "purple toes", skin necrosis, jaundice, nausea, vomiting, pancreatitis and hepatic dysfunction.

A few examples of ENHANCED effects are with alcohol, allopurenol, analgesics (eg; aspirin, paracetamol), antiarrythmias, antibacterial (eg. Metronidazole, erythromycin), antidepressants, antifungals (eg; Miconazide including oral gels.

A few examples of REDUCED effects are

with St. John's Wort and Phenobarbitone. However with phenytoin one gets both reduced and enhanced effects.

The periodontal condition worsens considerably in some patients with Warfarin and some patients will lose all their teeth, since many antibiotics will enhance the effect of warfarin one has to treat this with caution eg. One cannot use Elyzol gel (Flagyl) for instance.

One has to liase with a hospital consultant prior to any planned extractions, so that the warfarin level can be reduced prior to the appointment.

One cannot stress the importance of care in any prescription with these patients due to the possible adverse consequences.

Eg. Daktarin oral gel contains Miconazole. There is a special warning on the instructions to monitor anti-coagulant effects and to reduce dosage if necessary.

### Maltese Expletives in the Clinic and their Intimations

Qieghed nara l-appostli -Patient in a lot of pain

Immoderani, taghfasnix - Can I have a discount?

Imbaghad incempillek Patient does not want appointment

Se nitqalla Get a bowl and a mop

Ghandi toqba zghira -Guaranteed large filling

Tahraqnix man! Don't tell me off

# Augmentin 875/125mg

875mg amoxicillin/125mg clavulanic acid per tablet

NEW STRENGTH & POWER when you need it most

a higher dose of amoxicillin

Trade name: Atgmentin 875/125mg Film Coated tablets Quantity of active ingredient(s) per unit dose: Augmentin 875/125mg Film Coated tablets contain Amoxicillin uhydrate equivalent to 875mg amoxicillin and potassium devulanate equivalent to 125mg (lavulanic gcid: Indications: Amoxicillin-davulanate is indicated for short term treatment of bacterigin indections when caused by amoxicilin-davulanate susceptible organisms (see "Or (riful details), Posology and Administration: 875/125 mg twice daily, Severe infections (including chronic and recurrent unant) trainant place infections and higher david provided in the properties of t

those receiving high-doses, antibiotic associated coiles, hepatins and cholestatic jiutifidice—these events have also been noted with other perioditions and celephologopins, (Sevens-Johnson syndrome, tooic enderrial necrolissis. See SPC for INI details.) Telegal category: POM Product Liberto, Number 28, 678/172/6 Markeing Authorisation Holder: Classon-mithisting (Ireland). Unitled, Stonemasons way, Rathfantami Dublin à 6 Parther Johnmal Polishing and John See Stonemason way, Rathfanhami Dublin à 6 Parther Johnmal See Stonemason way, Rathfanhami Dublin is fair of 1985 Stone Section 498-5725 Details or homeaston. Development of the Commission of the Production of the Prod



