

香港醫訊



THE HONG KONG MEDICAL DIARY

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AROUND THE WORLD THROUGH AMY'S LENS

Dr. Amy Pang is a Specialist in Radiology. She is an enthusiastic amateur photographer and has won numerous local and international photographic awards. (www.amypang.net).

This talk will take the audience on an extravaganza of beautiful images of countless photographs taken during her photographic expeditions.



DR. AMY PANG Photography Talk

Date: 25 November 2008 (Tues)

Time: 7pm

Venue: Lecture Hall, 4/F Duke of Windsor Social Service Building,
15 Hennessy Road, Wanchai, HK

Admission: Free. Seats are limited.

Prior registration is required and on a first-come-first-served basis.

Enquiry: The Secretariat of The Federation of Medical Societies of
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Implant Dentistry - The Ultimate Dentistry



Dr. Albert MP Lee

BDS, MSc, FRACDS, FCDSHK(Paed Dent),
FHKAM(Dental Surgery)

Editor

Dr. Albert MP Lee

The ultimate aim of all dental treatments is to provide a functional dentition and comfortable oral environment to satisfy the criteria of mastication, speech and aesthetics. All dental treatment philosophies are directed to all these criteria and various clinical techniques have been developed and evolved through years of meticulous researches in dental science and technology.

However many conventional treatment techniques in dentistry have their limitations in various clinical situations. Periodontists are still looking for solutions to treat "periodontal downhill" patients with mobile teeth; endodontists are looking for solutions to treat "hopeless teeth" after repeated endodontic therapies; orthodontists are looking for additional means of anchorage for moving teeth; paedodontists are looking for solutions to treat patients with dental trauma, hypodontia and ectodermal dysplasia; prosthodontists are looking for effective solutions to treat patients requiring oral rehabilitation; oral and maxillofacial surgeons are looking for solutions to restore occlusion for patients requiring maxillofacial surgeries; general dentists are looking for solutions to treat patients with unsatisfactory dentures and failing dental bridges.

With the development of osseo-integrated dental implants, **Implant Dentistry** provides a solution for all these clinical problems that could not be satisfactorily treated by conventional means and methods. Now there is hope for replacing teeth with advanced periodontal diseases; there is hope for replacing teeth with root fracture after endodontic treatments; there is hope for effective intra-oral anchorage for moving teeth during orthodontic treatments; there is hope for replacing congenital missing and avulsed teeth; there is hope for effective rehabilitation of patients with incomplete dentition; there is hope for patients requiring extensive maxillofacial reconstruction; there is hope for restoring unsatisfactory dentures and failing dental bridges. Implant dentistry has evolved as a clinical technique for many unsolvable clinical conditions; it is not a technique of any single dental specialty, but a technique for all dental clinicians. Hence continual education and training is essential for all dentists to acquire the knowledge and skill of this "**Ultimate Dentistry**" in modern dentistry.



As a New Councillor...

Dr. Ka-lau Leung

MBChB, FRCS(Edin), FCSHK, FHKAM, MD



Dr. Ka-lau Leung

First of all, I would like to express my heartiest thanks to all electors for their support and trust. In the coming years, I will try my best to materialise my election pledge, meliorate our plight, strive for better healthcare, and scrutinise the Government performance and policy on behalf of the profession.

Upon being elected, I received a lot of congratulations, but also some advice that my election platform was "without substance", that I won the seat with only 33% of votes, that I might not understand the needs of colleagues in the dental and private sectors, and that I should also pay attention to other public issues. I will always keep these comments in mind and I shall briefly reiterate what I will try to achieve.

Imbalance Between the Public and Private Sectors

This is an imminent problem faced by colleagues in both sectors. In a consultation meeting for the 2008 Policy Address with the CE, I have suggested to Mr. Tsang the idea of "Tax Exemption for all Medical Expenses" as an incentive to attract the middle class to move from the Hospital Authority to the private sector. Sensibly speaking, I am not expecting the Government to implement the policy immediately as it would affect Government revenue, but the possibility is worth investigating and putting up as an option in the second stage of the Health Financing consultation.

For the time being the Government shall take some immediate measures to remove obstacles of patient movement such as, provide lands for building private hospitals and include terms for fair competition; re-open Tsan Yuk to provide obstetrics beds as suggested by Dr. PL Ho; speed up the establishment of a secure but convenient web-based patient record platform; streamline private-public inter-referrals... to name but a few.

Health Financing and Medical Insurance

At present both the public and the profession do not favour any mandatory savings or insurance scheme, especially when the economic outlook is gloomy next year. Whatever the consensus will be in the future, it is essential to liaise with the insurance industry to provide products with wider coverage. Be it necessary to implement a mandatory scheme, co-payment must be allowed so that pricing will follow the market and not monopolised and fixed by the Government or insurance companies.

Members' Bills

Hundreds of Government bills are submitted to Legislative Council every term. Bills related to the medical profession are seldom put on table because their priority is low in the Government's agenda. The Basic Law provides that *LegCo Members may introduce bills in accordance with the provisions of this Law and legal procedures. Bills which do not relate to public expenditure or political structure or the operation of the government may be introduced individually or jointly by members of the Council. The written consent of the Chief Executive shall be required before bills relating to government policies are introduced.*

Some issues may be resolved appropriately in the form of private bills, such as, to regulate HMO, to give legally binding effects to agreements on medical indemnity, to amend the Dentists Registration Ordinance ... My ambition looks naive initially because Members' motions were very frequently turned down by the President, but it does give stimulations to other senior LegCo Members. The stand of Mr. Tsang Yok Sing was a point for discussion when he ran for the office of President.

Standard Working Hours for Public Doctors

Our appeal for standard working hours was dismissed by the Court of Appeal by majority. However, the Honourable Madam Justice Yuen agreed with us, she said *"With respect, it seems to me that that [HA's] argument confuses the issue. The doctors are not refusing to work overtime or to be rostered on call. They are simply asking for recompense for the additional time worked - primarily by asking that their employer provide for time-off. The fact that doctors are prepared by virtue of their culture and ethos to attend to patients whenever required does not justify an employer denying them proper recompense for the work they do. To suggest otherwise, it seems to me, is to take unfair advantage of that culture and ethos."*

Leave to appeal to the Court of Final Appeal has been granted on 25 September 2008, and the Court of Final Appeal will hear the case on 29 September 2009. It is a bit late, but it is more reliable than HA's empty promises.

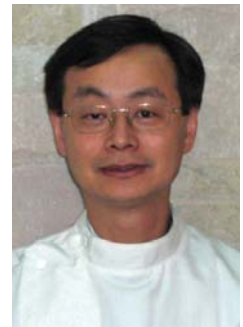
In the coming four years, there are many challenges in our professional community of healthcare. To act more effectively, a good communication and consultation with professional societies is needed. I regard the Federation's support as a crucial factor. Let's work together for the betterment of our medical system.



Computed Tomography in Dentistry

Dr. Thomas Ka-lun Li

BDS(Hong Kong), MSc(Lond), DRRRCR, DGDP(UK), FCDSHK, FHKAM(DS)
Private Dental Practice



Dr. Thomas Ka-lun Li

This article has been selected by the Editorial Board of the Hong Kong Medical Diary for participants in the CME programme of the Medical Council of Hong Kong (MCHK) to complete the following self-assessment questions in order to be awarded one CME credit under the programme upon returning the completed answer sheet to the Federation Secretariat on or before 30 November 2008.

Basic Dental Radiology

Radiographic examination forms an important part in the diagnosis and treatment of dental pathology. Nearly every dental clinic is licensed to install one or more x-ray equipment. Teeth and jaw bones are hard tissues which show up particularly well on radiographs. Traditional setup consists of a dental x-ray tube, analog intra-oral films and processing chemicals. This is the smallest and simplest x-ray diagnostic system used in a clinic. Although simple, this setup can produce reasonable intra-oral dental radiographs with good image contrast and relatively high resolution. Pathology like dental caries and periapical infection are readily detected. Anatomical restrictions in the dentomaxillofacial region limit the projection angle to certain pre-defined planes making multiple projections at different angles difficult. Accurate dimensional measurement of the jaw bones is not possible.

Rapid advances in diagnostic imaging and computer technology have major impact in dental radiology and dental practices as a whole. More and more dental clinics are equipped with digital imaging system and panoramic machines. This equipment enhances the radiological diagnostic ability and starts to overcome the anatomical restraints. Simple linear tomography is available in most panoramic machines but inferior image quality and complicated procedure had prevented it to become a popular projection. Until quite recently, 3 dimensional and sectional imaging are not possible in a dental practice.

Computed Tomography

Computed tomography (CT) has been available in Hong Kong since early 1980's. It was used to be an expensive and sophisticated machine which would only justify to be installed in large general hospitals. Years of development has seen this technology channels down stream and becomes much more user-friendly. At present, over 10 dental practices have equipped themselves with their own in-house CT scanners and the number is growing. Contrary to helical CT, these scanners utilise cone beam technology with flat panel detector. Often referred to as cone-beam CT (CBCT) or

volumetric CT (VCT), these scanners are characterised by small footprint, ultra high resolution, low radiation dose, and relatively inexpensive.

Flat panel detector of CBCT consists of amorphous silicon and it captures radiographic image of the patient in high resolution. The imaging characteristics of the detector make CBCT particularly suited for hard tissue imaging. A routine scan in the jaws can be completed with one scanner rotation, which takes 10 to 20 seconds. Conventional axial, coronal and sagittal planes do not provide the best viewing projections in the dentomaxillofacial complex. Special computer software is available to view these CT images in a curved tomographic plane that follows the dental arch. This produces more realistic and practical images that facilitate interpretation.

The typical spatial resolution in hard tissues is from 0.1 to 0.4mm. This is more than enough in most clinical situations. The radiation dose is only about 10% that of a comparable helical CT. The much reduced radiation dose and much enhanced radiological performance of CBCT have modified the selection criteria of CT. Minor clinical conditions which in the past do not justify CT because of cost and radiation dose have to be reconsidered in the light of this new development. The whole setup of CBCT has been customised to suit almost all common dental radiological diagnostic needs.

Computer Aided Treatment Planning

After CT scanning, there are a large amount of patient data in the computer. The patient's anatomical information is stored as a 3 dimensional matrix but most viewing methods are only 2 dimensional. In order to fully utilise the patient data, clinicians have to learn to use special viewing software to produce the required diagnostic images. Apart from basic adjustment of window width and level (contrast and brightness), most viewing software allow clinicians to manipulate the images in 3D or in any origination plane. This gives clinicians a realistic perception of the patient anatomy in real time. Clinicians are now much more involved and in control in advanced imaging.



Some clinicians still prefer CT images to be printed on films for easier viewing, but numerous studies have shown there is increased distortion and loss of clinical information with printed CT images. There is significant loss in the transfer of data from scanning computer to printed films. Films, once printed, cannot be altered to suit clinicians' preference. Digital images are best viewed digitally, i.e. by computer monitor. Similar things can be said with digital camera and printed photo.

A further development in viewing software is computer aided treatment planning. There is several planning software available in the market. They help clinicians in diagnosis and treatment planning for dental implants, orthodontics and maxillofacial surgery. Surgical template can be fabricated according to the computer planning. The template guides the surgical procedure to much higher precision. The 3 dimensional presentation of the planning is also a good communication tool to show patients the expected treatment outcome. High quality 3D images showing pre- and post-operative conditions eliminate any possible misunderstanding from patients.

The Way Forward

The development of advanced imaging in recent years is breathtaking. Just a few years ago, 3D and sectional imaging were limited to conventional helical CT. 3D reconstruction and multiplanar reformatting can only be done with CT workstations. All images have to be printed on films and viewed using light box in clinic. Today, CT scans are considered essential for multiple dental implant placements. Quite a few dental surgeons installed their own in-house CBCT largely because of high demand for dental implants. Many clinics are equipped with special software for implant planning and orthodontics.

The further development of CT in dentistry will certainly be higher infiltration of CBCT machines into dental clinics and broadening its application to almost all dental treatment. The ultra high resolution nature of CBCT makes it perfect in detecting root fracture, accessory root canals or lateral perforation. Periapical changes can be detected much earlier than conventional periapical radiograph. There is huge potential in endodontic treatment. Dentistry, as a whole, still needs some time to adapt to this rapid development in imaging. With the vastly improved diagnostic ability from CBCT, the treatment outcome becomes highly predictable. The quality of all dental patient care will be enhanced by it. One thing is sure: the change has just begun.



Fig. 1 CBCT machine

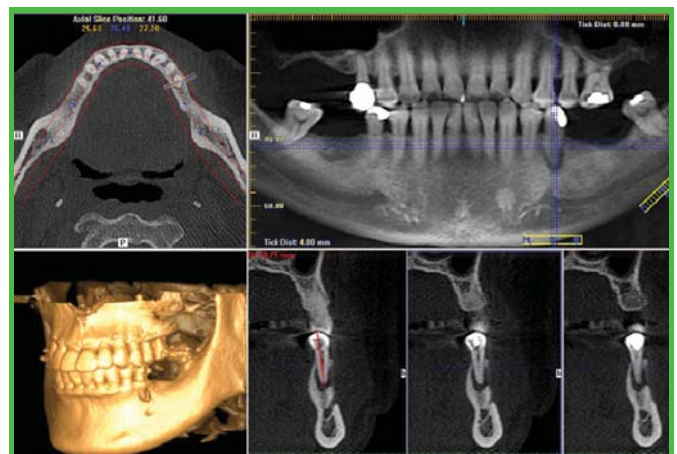


Fig. 2 CBCT viewing software

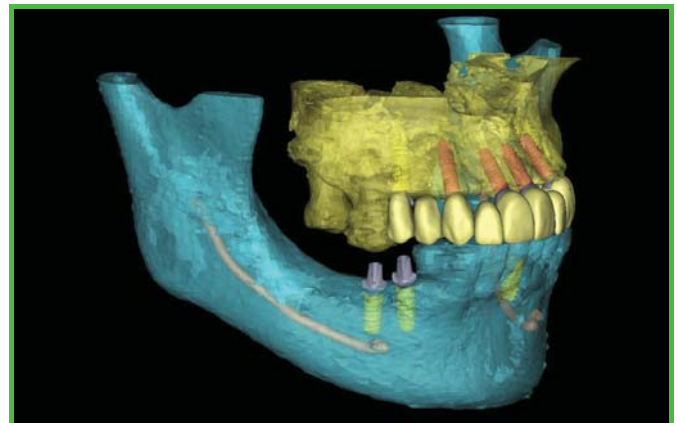


Fig. 3 computerised dental implant planning



MCHK CME Programme Self-assessment Questions

Please read the article entitled "Computed Tomography in Dentistry" by Dr. Thomas Ka-lun Li and complete the following self-assessment questions. Participants in the MCHK CME Programme will be awarded 1 CME credit under the Programme for returning completed answer sheets via fax (2865 0345) or by mail to the Federation Secretariat on or before 30 November 2008. Answers to questions will be provided in the next issue of The Hong Kong Medical Diary.

Questions 1-10: Please answer T (true) or F (false)

- 1. Dental x-ray machine and intra-oral film can produce good diagnostic radiographs.
2. Periapical radiograph cannot detect early periapical changes.
3. Dimension of jaw bones can be measured accurately with analog films.
4. Cone beam CT is a form of helical CT.
5. The radiation dose for cone beam CT is 10% of helical CT.
6. Typical imaging resolution for cone beam CT is about 1mm.
7. CT images are best viewed with films and good light box.
8. The increase in demand for 3D and advanced imaging is largely contributed by the demand for dental implants.
9. Apart from dental implants, cone beam CT is not very useful in other dental treatment such as endodontics.
10. With better diagnostic imaging, the success rate of treatment will be enhanced.

ANSWER SHEET FOR NOVEMBER 2008

Please return the completed answer sheet to the Federation Secretariat on or before 30 November 2008 for documentation. 1 CME point will be awarded for answering the MCHK CME programme (for non-specialists) self-assessment questions.

Computed Tomography in Dentistry

Dr. Thomas Ka-lun Li

BDS(Hong Kong), MSc(Lond), DDRRCR, DGDP(UK), FCDSHK, FHKAM(DS)
Private Dental Practice

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Answers to October 2008 issue

Update on Lupus Erythematosus, Dermatomyositis & Systemic Sclerosis

- 1. C 2. E 3. D 4. A 5. D 6. B 7. C 8. A 9. B 10. E

With Compliments

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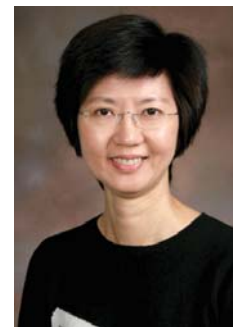


Oral Health Promotion by the Department of Health

Dr. Deborah YH Chan Cheng

BDS(Syd), MSc(Lond)

Senior Dental Officer, Oral Health Education Unit, Department of Health, Hong Kong SAR Government



Dr. Deborah YH Chan Cheng

The Department of Health implements the oral health policies of the Hong Kong SAR Government through its Oral Health Education Unit (OHEU). The Unit is a dedicated team fully devoted to the promotion of oral health to the people of Hong Kong.

To promote oral health to the Hong Kong community, the OHEU employs two strategies: one is through target specific promotion programmes and second is through information giving means.

Target Specific Oral Health Promotion Programmes

Certain captive population groups are targeted for tailored oral health promotion programmes. These programmes are characterised by being age and setting specific. They have clear objectives and performance targets that measure either oral health gain or desirable behavioural changes.

The current programmes are the Love Teeth With Your Kids Programme, the Dandelion Oral Care Action and the Teens Teeth Programme.

Love Teeth with Your Kids Programme

Love Teeth With Your Kids Programme is targeted at the 3-5 year-old children studying in the local kindergartens and nurseries organised respectively by the Education Bureau and Social Welfare Department. The Programme aims to i) increase the percentage of children brushing their teeth with fluoride toothpaste twice daily and ii) increase the percentage of parents providing supplementary toothbrushing for their children every evening. The programme has been evaluated to demonstrate statistically significant increase in the oral care habits among the children as well as the parents as the set objectives in the past three consecutive years. It has since been placed on a long term implementation.

The Programme is implemented in all kindergartens and nurseries with the cooperation of the teachers. The participating schools are given education materials by the OHEU, which include a teacher's manual for every teacher, a student handbook and a VCD for every child in the school and some posters for the school to promote the Programme. Having acquired these materials, the schools designate a 6-week period to conduct the toothbrushing activity school-wide. The children are encouraged to watch the cartoon story in

the VCD and follow the instructions in the VCD to participate in the activity. They are required to have the parent check off their toothbrushing, including the supplementary toothbrushing habits at home, and sign off in the handbook everyday. Should they have performed the required toothbrushing activities at home, they are awarded with stickers and certificates according to their level of compliance to the requirements. There are two types of awards: one for Self Care for the child's independent effort and one for Love Kids for the parent's supplementary toothbrushing effort.

The entire Programme is sustained on voluntary participation of the children, the parents and the teachers. Nonetheless, we have consistently over 600 schools with around 100,000 children participating every year. Positive feedback from parents appraising that the Programme has been successful in helping children establish a good toothbrushing habit is often received.

August 2008



Love Teeth with Your Kids Programme 2007-08 VCD

Dandelion Oral Care Action

The Dandelion Oral Care Action is an oral health promotion programme for the mild and moderate intellectual disabled children in the special schools. It is a school programme based on the systematic toothbrushing and flossing techniques developed in collaboration with the Po Leung Kuk Centenary School, a special school for the moderate intellectual disabled children in 2004-05 academic year.

The systematic toothbrushing technique is easy for the special children to learn and easy for the teachers to teach. The entire toothbrushing process is broken down into many small and achievable steps, which are



grouped into 5 stages with 36 groups of teeth to brush. The flossing technique also follows the sequence adopted in toothbrushing. The flossing of two approximal surfaces in the same interdental space is considered one group. The children are taught the technique by Stages and by groups. They are required to be proficient with what they have already learned before they progress to the next group or stage. They must acquire the toothbrushing skill fully before they learn the flossing technique. Both techniques are taught to and learned by all the teachers, parents and children in the school to create a supporting environment for the children to master the skill.

The Dandelion Programme objectives are defined with short term and long term goals. It is targeted to reduce the visible plaque or the bacterial film, accumulated on the children's teeth in the short term of one to two years. The long term goal is for the child who has been through the entire schooling of 12 years. He is expected to be able to brush and floss his own teeth competently and independently by the time he leaves school.

The Programme is implemented in a train-the-trainer approach. The OHEU trains the school nurse and at least one teacher from each school to be the Oral Health Trainers (OHT). The OHTs learn some basic oral care knowledge and the two oral care techniques, which are practised on the manikin first, then on the children until they have fully mastered the skills. They, in turn, train all the teachers in the school in the same manner. They also conduct workshops to train the parents, who are expected to brush and floss for their children twice a day at home using the same techniques.

The Programme was successfully launched and adopted in all special schools with moderate intellectual disabled children in 2005-07. OHTs have been trained. The oral care skill has become part of the self-care curriculum of the schools. The parents who participated on voluntary basis have found their toothbrushing and flossing skills for their children improved. Then in 2007-08, it was launched in schools with mild intellectual disabled children. Currently, all the 20 schools in Hong Kong subscribe to the Dandelion Programme. Systematic evaluation for the achievement of objectives will begin in 2008-09. Various evaluation parameters will be measured annually or bi-annually over the next 12 years.

Teens Teeth Programme

The Teens Teeth is a school-based programme employing a peer-led approach in promotion of oral health to the F.1 students. Its objectives are to i) reduce the condition of gingival bleeding ii) improve their flossing habit in the intervention students.

The participating school sends ten F.4 students to be trained as peer leaders. After having undergone a week-long leadership training, they are commissioned to promote oral health to all the F.1 students in the school. They are required to organise any activities to achieve the objectives of the Teens Teeth Programme within the academic year. Throughout the year, they are supported emotionally by the peer mentors who are the ex-peer leaders and professionally by the dentist mentors who are volunteer private dental practitioners. The OHEU, however, provides material support.

A randomised controlled trial was conducted in 2005-06 on five pairs of intervention and control schools with sampled F.1 students to test the effectiveness of the Teens Teeth Programme. Comparing to the control, the results showed that there was a 7% reduction in gingival bleeding and a 7% increase in the number of students flossing more than 3 times a week. Both results were statistically significant.

As the success of the Programme demands intensive provision for the peer leaders, it cannot be implemented on a massive scale. A maximum of ten schools per year could be served with the current resources. Nonetheless, experience with the past five batches of peer leaders shows that they have been thoroughly committed to the promotion of oral health to the people around them ever since the one-year commission. The number of people who will benefit from these life-long promoters is probably immeasurable.



*Dandelion Oral Care Action
Parent participant learns how to brush*



*Teens Teeth Programme
Peer leaders conduct dental flossing workshop in school*

Information Giving

Information on all aspects of oral health for the knowledge of the general public is given through the Love Teeth Campaigns, the public education services and other education resources such as the website and hotline, education materials and printed information.

Love Teeth Campaigns

Since 2003, the OHEU has launched annual Love Teeth Campaigns with a specific theme every year. The Campaigns employ a media publicity approach to strategically reach the non-captive adult population, which composes of half of the people of Hong Kong. Specific thematic messages are typically delivered through TV commercials, TV programmes, MTR posters, newspapers, radio programmes;Ketc. Sometimes, a joint promotion programme with the dental profession or a community organisation is organised as part of the campaign publicity.

Telephone survey evaluations show that there has been a slow but steady increase in the number of people taking up the flossing and dental check-up/professional teeth cleaning habits over the years. Though the awareness of periodontal disease was raised but the awareness of specific knowledge about the disease fluctuated with the forcefulness of the messages given.

Public Education Services

The OHEU operates routine public education services to targets upon requests in the following:

Brighter Smiles Playland

During the school year, 4 year-old children groups book the Brighter Smiles Playland for a one-hour play-learning activity programme led by a Dental Therapist. The Playland is located in Argyle Street Jockey Club School Dental Clinic in Mongkok.

Oral Health Senior Hall

In July and August, when schools are out of session, the Brighter Smiles Playland is turned into an Oral Health Senior Hall facility. The OHEU runs a one-hour interactive programme for the elder groups at the Senior Hall.

Oral Health Promotion Bus

The Oral Health Promotion Bus is equipped with information kiosks and individually paced self-learning oral simulation laboratory for the practice and drill of correct toothbrushing and dental flossing techniques. The bus is stationed throughout the territory for walk-in access by the public or at primary schools upon booking for student groups.

Oral Health Talks

The dental officers or dental therapists of the OHEU deliver tailored target specific talks on oral health in accordance to the audience's needs to community groups upon requests.

Education Resources

Oral health education resources are developed for free access by the public through multiple channels. They are the:

Toothclub Website

The toothclub website: www.toothclub.gov.hk, contains all the information about oral health for the entire general population in any age groups. The information are organised in three zones: the family campus, the teens guide and the adults zone. All the information is presented interactively with graphics for browsing in pleasure and leisure. There is other information about the services provided by OHEU.

For registered organisation users, they can access to book or apply for all the public education services through the website.

Recorded Hotline

The recorded messages allow the access to oral health information by those who are not familiar with the internet but are more familiar with the phone and fax. The messages are informative but some are interestingly presented to give pleasure to the listeners. Fax information could be acquired through the hotline system.

Education Materials

Education materials such as videos, games, exhibits and models are developed for free loan to organisations and dentists. They are handy materials for setting up small scale oral health education activities by students, volunteers;Ketc.

Printed Materials

About 50 titles of posters and pamphlets are printed for free distribution to organisations, doctors and dentists. They can place their orders online through the toothclub website and come to collect them for their clients within a week.

Future Development

The OHEU is still exploring new ways to reach the unattended targets effectively. We also stay abreast with technological development in the provision of information for public education. We welcome any suggestions and opinions to better promote oral health to our community.



Brighter Smiles Playland



What You Need to Know About Implants

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Dr. Patrick BC Wu

Introduction

The advantage of using implants to replace missing dentition has been advocated since its introduction in the late 1960s by the Swedish orthopedic surgeon Prof. Branemark¹. The original protocol was to provide anchorage in the lower jaw of the edentulous patients who had difficulties with their conventional complete dentures. Dental implants were surgically installed in the jawbone to provide support and retention for the dental prostheses. A process called osseointegration occurred when bone is allowed to integrate on the titanium implant surface under optimal condition². In this article, the various aspects of dental implant treatment will be discussed.

Applications of dental implant

In general, patients who have acquired or congenital missing teeth can be benefited from implant treatment. Conditions such as the loss of teeth due to caries or periodontal disease, genetic conditions such as ectodermal dysplasia, trauma from accident or gun-shot, tumour resection or reconstructed defects can be rehabilitated.

Implant crown

Implants are installed to support individual missing teeth in the oral cavity. The feasibility of this treatment modality depends on the amount of alveolar bone available. Apart from clinical and radiographic assessment, advanced imaging technology such as CT scanning provides additional information of the quality and quantity of the bone. Implants of suitable diameters and lengths can be selected for installation. Recently, implants with rough surface morphology are becoming more popular than smooth surface implants due to the fact that a reduced osseointegration time can be achieved (Fig. 1 & 2).

Implant Bridge

In the situation where multiple teeth are missing, a number of implants can be installed to rehabilitate the dentition. Consensus for the number of implants required is not available scientifically and the decision is usually dependent on the experience and preference of the practitioners. However, to reduce the degree of complexity and cost of the prosthodontic reconstruction, the trend is to use the minimal number of implants to support the prosthesis (Fig. 3 & 4).

Full arch implant

In the rehabilitation of a full edentulous arch complicated with bone resorption, the options of 3 to 6 implants will be commonly selected to support a long-

span fixed prosthesis. Promising long-term results can be achieved if the treatment is adequately performed and the post-treatment oral hygiene of the patients are maintained (Fig. 5 & 6).

Implant supported over-denture

The technology in using implants to assist stability and retention of partial or complete dentures is available. Patients with compromised alveolar bones which are not suitable for fixed prosthesis reconstruction can be benefited from the implant supported over-denture alternative. As the dentures are both mucosal and implant bearing, the reliance of anchorage on implants is less and fewer implants are therefore required. This is a relatively inexpensive oral rehabilitation for both the maxillary and mandibular jaws. For the maxilla, evidence on patient satisfaction has proven that implant supported over-dentures are as good as the implant fixed option. If the mandibles are reconstructed with the implant supported over-dentures, and especially for jaws with increased bone resorption, significantly higher bite force and better control of the prostheses are demonstrated in the patients (Fig. 7 & 8).

Craniofacial prosthesis

Implants are used widely in the craniofacial region with promising results. Examples are implant-retained ocular and auricular prostheses (Fig. 9 & 10).





Success criteria

The most commonly referred guideline was proposed by Albrektsson and colleagues in 1986³.

1. The implant must be clinically immobile.
2. There should be no peri-implant radiolucency around the implant.
3. Annual marginal bone loss around the implant should be less than 0.2mm after 1st year.
4. There should be absence of persistent pain, discomfort or infection related to the prosthesis.
5. The implant has to be 85% success after 5 years, and 80% success after 10 years.

Implants are considered to be 'survived', instead of 'success', if they do not meet all the criteria even though they are still functioning.

Patient factors affecting implant treatment

Some conditions have been cited as potentially critical, but studies comparing patients with and without the specific conditions in a controlled setting are sparse.

Diabetes

In the oral cavity, xerostomia, caries and periodontitis have been linked to diabetes mellitus. It is associated with various systemic complications including retinopathy, nephropathy, neuropathy, vascular disturbances and impaired wound healing. The osseointegration process, will logically be affected as it depends on bone healing. In retrospective studies, uncontrolled diabetes has been reported to have lower implant success rate (85%)^{4,5}. The tendency for subjects with diabetes to have higher failure rates is equivocal⁶. Special contingency planning is important in installing implants in those patients. The usual approach is to include additional implants in the restorative plan.

Osteoporotic patients

The evidence for an association of osteoporosis and implant failure was not scientifically established although osteoporosis has been mentioned as a possible risk factor for osseointegration failure due to the decrease in bone mass and density⁶. The prevalence of osteoporosis increases among the elderly and after menopause. It appears that osteoporosis, as diagnosed at one particular site of the skeleton, is not necessarily affecting the maxillary and mandibular bones⁷. It is important for practitioners to be aware of the potential risk for treating patients who are under bisphosphonate therapy, either orally or by intravenous (IV) infusion. Bisphosphonates suppress osteoclast activity and their IV application has been reported to be associated with osteonecrosis of the jaw^{8,9}. Implant surgery, if to be performed in those patients, will be considered at risk. A case report described 63 cases of osteonecrosis of the jaw in cancer or osteoporotic patients¹⁰. The effect of patients having long-term oral bisphosphonates is still not fully understood and implant treatment on those patients must also be performed with caution.

Smoking

Similar to the negative effects in periodontal disease, the adverse effect of smoking on implants has also been well documented^{11,12}. Significantly more failures were reported in smokers than in non-smokers and having a hazard ratio is 4.3 times¹³. In the long-term, smoking is associated with significantly higher levels of implant marginal bone loss and poor peri-implant gingival health^{14,15}. Heavy smokers, those who take more than 12 cigarettes per day, will be affected more severely¹⁶. A smoking cessation protocol was suggested that complete cessation for 1 week pre-surgery and 8 weeks post-surgery has shown short-term benefits of having similar failures to non-smokers. However, the compliance of the patients who follow this protocol is being questioned.

Age

There is no upper age limit. Although theoretically patients with increased age will have more systemic health problems, there is no evidence correlating old age with implant failure¹⁷. On the other hand, the minimum age of a patient for implant has been questioned. Because of their osseointegrated character, installed implants behave as an ankylosed element and do not follow the further growth of the jaw and alveolar bones¹⁸. Therefore the clinical outcome, in terms of appearance and occlusion, of the implant prosthesis will be compromised as the patient's facial growth continues. The installed implant will be retained in a submerged position after some years.

Irradiated bone

Dental implants are commonly used to provide anchorage for craniofacial prostheses. Irradiation therapy in combination with surgical excision is the treatment protocol generally employed for malignant tumours in the craniofacial region. Although irradiation is not an absolute contraindication to implant installation due to the risk of osteoradionecrosis, reported success rate is only about 70%¹⁹. Adjunctive hyperbaric oxygen (HBO) therapy has been proposed for previously irradiated patients prior to implant treatment. A case-controlled study has shown increased implant success rate with HBO therapy in irradiated patients²⁰.

Complications

Although the success rate is high, failures do occur. Failure is classified as early, when osseointegration fails to occur, or as late, when the achieved osseointegration is lost after a period of function. It can also be biological or mechanical in nature. Biological failures include those implants which are unable to osseointegrate due to surgical problems, or loss of established osseointegration due to infection. Heating of the bone to 47°C for 1 minute during drilling will cause failure in osseointegration^{21,22}. Mechanical failures refer to complications of the connecting parts such as screw loosening or fracture, deterioration of the prosthetic components. There are other complications such as the poor angulations and positioning of the implants in the jawbone giving rise to problems in the reconstruction, poor esthetic outcome of the prostheses, and, inadequately contouring of the prostheses causing daily oral hygiene maintenance difficulties or impossibilities.



Patient satisfaction

Patients are more interested in enjoying suitable levels of comfort, aesthetics and function. These are the factors difficult for the practitioners to measure. To satisfy the patients, we have to administer the implant treatment that is clinically achievable, while at the same time acceptable by the patients. Dental implants do improve the quality of a patient's life. In a longitudinal clinical trial to compare the impact of the dental implant on the psychosocial well-being of subjects with problems related to their conventional dentures, it was found that patients who had received implant supported prostheses had a profound improvement in health-related quality of life. Moreover, subjects who wore implant supported mandibular over-dentures had significantly increased ease of chewing, denture stability, and comfort than patients with conventional dentures^{23,24,25}. Although implant prostheses enhance patient satisfaction, it is still controversial to determine whether the fixed or the removable option has a better impact on the quality of life and satisfaction for the patients. Factors such as age, gender, occupational status, and socioeconomic class might influence the outcome. The literature lacks valid data of the relationship between satisfaction and personality profiles and their impact on the success of this treatment modality.

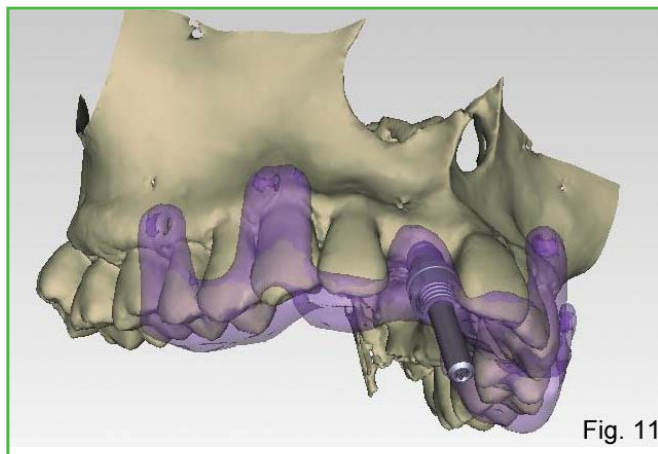


Fig. 11

New development

Computer CAD-CAM technology has been utilised in assisting implant reconstruction treatments. Custom-made CT scan templates are worn by the patients during the scanning. Systematic planning of the number of implants, diameter and length, positioning and angulations can be performed using user-friendly 3D computer software based on the DICOM CT scan data of the patient's jaws. Vital structures such as nerves and vessels are identified and the implants are planned in the most optimal areas. High precision surgical guides (Fig.11), according to the planning, will be delivered to the practitioners by courier after internet transmission of the digital data to specific manufacturers. The second advantage is that it is possible to pre-fabricate the implant prostheses, temporary or definitive ones, prior to the implant surgery. Therefore, immediate restoration of function and aesthetics of the patients are possible. This concept is not new but long-term study is lacking. The final results of the reconstruction using this protocol can be varied and it is highly experience and technique sensitive. Errors such as the accuracy of the

CT scanning with respect to the relationship of the CT scan template and the jaw bone, repositioning of the surgical guide to the jaws during surgery, and the complex prosthetic procedures are the main sources of the failure.

Is implant for life?

It can be quite sure to say that the implant fixtures have a good prognosis of 95% success rate based on recent longevity studies^{26,27,28}. But the clinical outcome of the prostheses/restorations supported by the implant varies. Technical complications are not infrequent. The longevity of implant supported fixed prostheses was systematically reviewed in studies and the reported success rates were 95% after 5 years and 87% after 10 years respectively. It was also concluded that the most common failure of the prostheses supported by the implant was prosthetic teeth portion fracture (14%) and connection screw loosening or fracture (7.3%)^{29,30}. Other critical reviews showed that at 10 years conventional bridges were 71% problem-free whilst implant supported fixed prostheses were 61% instead^{31,32}. However, some of the mechanical complications can be managed if the prostheses are designed with screw-retained protocol as retrievability of the prostheses is maintained.

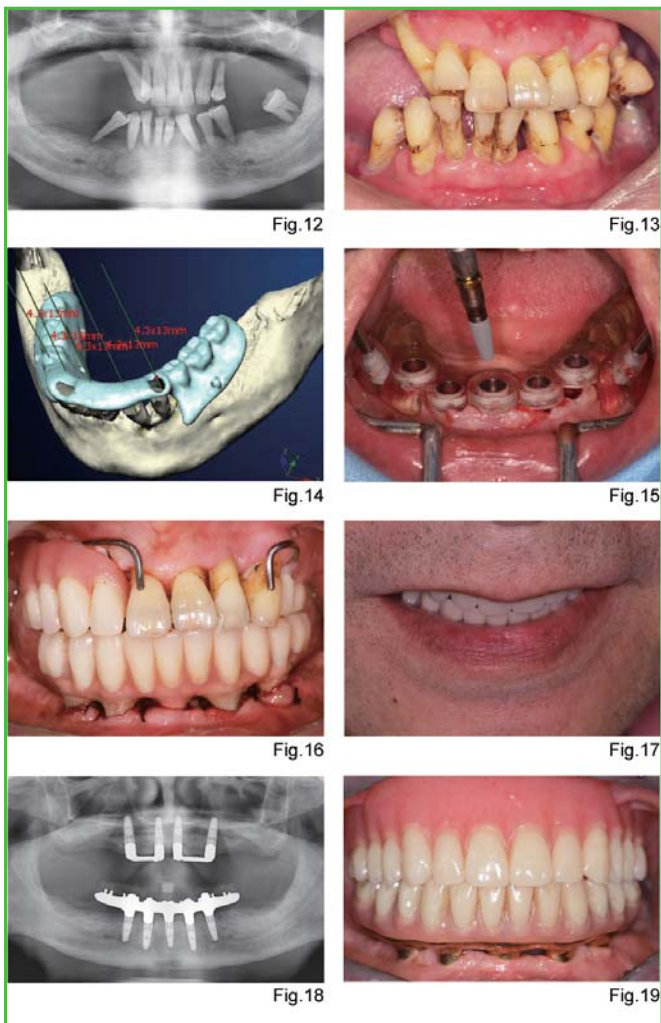
Summary

Implant is a reliable oral rehabilitation treatment nowadays. Information from research has provided the base for the clinical practice of dental implant. Not only knowledge and skill are required, the use of advanced imaging technology as well as the experience is of paramount importance in the success of implant dentistry.

A case example

Advanced implant rehabilitation was demonstrated in a 77-year-old Chinese male smoker who had mobile and hopeless teeth due to severe periodontal disease. Teeth removal and implants installation were performed in the same surgery. A set of temporary prostheses, pre-fabricated prior to surgery, was inserted to restore function and aesthetics immediately after the procedure. CAD/CAM computer software based on CT images was utilised in planning of implants in the jawbones and for the manufacturing of the surgical guide. The final prostheses were constructed following conventional prosthetic procedures after the stabilisation of the dentition with the temporary ones.

(Fig. 12, 13 Pre-op radiograph and frontal view showing teeth with poor condition; Fig. 14 Implant planning for lower jaw using CAD/CAM software; Fig. 15 Installation of implant using the software-generated surgical guide after complete removal of lower teeth; Fig. 16 Temporary fixed prosthesis inserted to lower jaw immediately after surgery. Upper temporary partial denture also inserted after multiple teeth removal; Fig. 17 Immediate aesthetic result; Fig. 18, 19 Six-month Post-op radiograph and frontal view showing the final prostheses in-situ.)



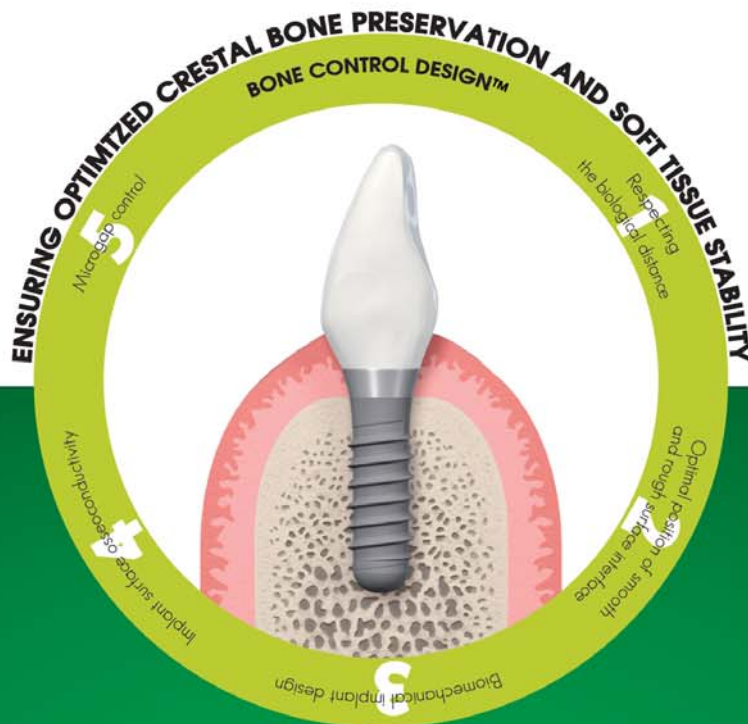
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² Buser et al, J. Dent. Res. 2004; 83:529-533

³ Oates et al, Int. J. Oral Maxillofac Implants 2007; 22:755-760



Forensic Odontology

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Dr. Carl KK Leung

Introduction

Forensic Odontology, or forensic dentistry, was defined by Keiser-Neilson in 1970¹ as "that branch of forensic medicine which in the interest of justice deals with the proper handling and examination of dental evidence and with the proper evaluation and presentation of the dental findings." There are three major areas of activity embracing current forensic odontology namely:

1. The examination and evaluation of injuries to teeth, jaws, and oral tissues resulting from various causes
2. The examination of marks with a view to subsequent elimination or possible identification of a suspect as the perpetrator
3. The examination of dental remains (whether fragmentary or complete, and including all types of dental restorations) from unknown persons or bodies with a view to the possible identification of the latter²

The natural teeth are the most durable organs in the bodies of vertebrates, and humankind's understanding of their own past and evolution relies heavily upon remnant dental evidence found as fossils.³ Teeth can persist long after other skeletal structures have succumbed to organic decay or destruction by some other agencies, such as fire.⁴

Identification by dental means is not a new technique. It has been said that Nero's mistress, Sabina, in 66 A.D., satisfied herself that the head presented to her on a platter was Nero's wife as she was able to recognise a black anterior tooth.⁵

The modern forensic case started in 1897 in disaster victim identification in Paris by a general dentist.

History of Forensic Odontology in Hong Kong

The Forensic Odontology Group of Hong Kong was set up by the Founding Professor of Oral Anatomy of HKU, Prof Ron Fearnhead, in 1983, in response to a shipwreck DVI(Disaster Victim Identification) operation in the South China Sea. Hong Kong was the first permanent forensic odontology centre in SE Asia. There was a temporary facility of the US Armed Forces Central Identification Laboratory which took care of the Missing In Action and Killing In Action GIs in the

Vietnam War in the 70's. After Prof Fearnhead and Dr Philipsen left HK in 1995, the local graduates took up the group. At present, the group has three consultants, one oral radiologist, two oral radiographers, one forensic technician and twelve trainees. It is interesting to know that there are no forensic odontologists in China mainland. The training is solely on apprenticeship. The local dental authorities do not regard forensic dentistry as a branch of dentistry. They have expressed the concern that "forensic dentistry" can be performed by anyone even without a dental qualification since it is a consultation on dead bodies.^{6,7} There is no formal pathway for training in forensic odontology in Hong Kong. The College of Dentistry and College of Pathology refused to set up a pathway for any formal training while forensic pathology is under the training pathway of the College of Pathology.⁸ The Dental Council also refused to recognise the academic qualifications that are issued by the overseas institution that lead to higher qualifications in forensic pathology in the training pathway in Hong Kong.⁹ Even the dental school has stopped the teaching of forensic odontology in the undergraduate curriculum when they started the problem based learning 10 years ago.

Disaster Victim Identification

Dental identification has been regarded as one of the primary identifiers in the INTERPOL disaster victim identification protocol.¹⁰ Sometimes, it may prove to be the only method that can be used to make or disprove identification. Most recently dental identification has proved its worth in helping to identify victims from the Bali bombing and the Southeast Asia tsunami disaster 2004. As other means of identification become less effective, the importance of dental identification increases. The dental structures and dental restorations may be the only parts of the body not destroyed, and they can be used even though they may be scattered over a wide area, such as occurs in aircraft accidents, terrorist attacks, partial incineration, fragmentation, and severe decomposition.¹¹

The definite establishment of identity of a body essentially comes from a detailed comparison and matching of tangible ante mortem records and post mortem findings. It is rarely the case that the two match in all aspects, so some judgment is required. This often requires the application of logic, and unless the person dies on the day of their last dental



appointment, it always requires the investigator to grasp the temporal framework in which the ante mortem records were amassed relative to the time at which the corpse was examined.

It is important to note that there is no minimum number of concordant points that are required for a positive identification which is different from the analysis of fingerprint.¹² In some cases, a single tooth can be used for identification if it contains sufficient identifying or unique features. Equally, a full mouth series of radiographs may not reveal sufficient detail to render a positive identification.¹³ The certainty of identification conclusion lies with the forensic odontologist, who must be prepared to justify his conclusions in court.¹⁴

When ante mortem dental records are unavailable and other methods of identifications are not possible, the forensic odontologist can assist in limiting the population pool to which the deceased is likely to belong and thus increase the likelihood of locating ante mortem dental records. This process is known as post mortem profiling. The information from this process will enable a more focused search for identity. A post mortem dental profile can provide information on the age, ancestry background, sex and socio-economic status of the deceased. In rare circumstances, it is also possible to provide additional information regarding occupation, dietary habits, habitual behaviour and occasionally, on dental or systemic disease.¹⁵

Facial Reconstruction and Facial Superimposition

If the post mortem profile does not elicit the tentative identity of the deceased, it may be necessary to reconstruct the individual's appearance during life. This is the responsibility of forensic artists who utilise the dental profile to help with facial reconstruction.¹⁶ The use of ante mortem photographs to permit facial superimposition of skeletal and teeth fractures have been used in cases of identification. This technique requires the availability of suitable ante mortem photographs showing the teeth. Often, angulations and magnification impose difficulties in positioning the images.¹⁷⁻¹⁹

DNA in Forensic Odontology

The resilient nature of the dental hard tissues to environmental assaults ensure that teeth represent an excellent source of DNA material.²⁴ When conventional dental identification methods fail, this biological material can provide the necessary link to prove identity. With the advent of the polymerase chain reaction, a technique that allows amplification of DNA at pre-selected specific sites, this source of evidence is becoming increasingly popular with investigators. Comparison of DNA from the teeth of an unidentified individual can be made to a known ante mortem sample like stored blood, hairbrush, clothing, cervical smear and etc or to a parent or sibling.²⁴ A recent study has found out that mitochondrial DNA can be

sourced from dentine powder obtained via cryogenic grinding, and also via dentine in the case of root-filled tooth.²⁵⁻²⁷

Age Assessment

There are a number of medico-legal reasons for determining the age of an individual. Dental structures can provide useful indicators to the individual's chronological age. The age of children can be determined by the analysis of tooth development and subsequent comparison to development charts, usually to an accuracy of approximately 1.6 years.²⁰ The use of attrition and development of third molars have been suggested as means of ageing those individuals over 18, but both are unreliable. Newer techniques like aspartic acid racemisation²¹ and translucent dentine^{22,23} have been proposed and proved to be highly accurate in adult age assessment.

Bite Mark

Bite marks may be present following a fight between adults or children, as part of a sexual or physical assault by an adult on a child, in rape or attempted rape where bites are likely to be noted on the breasts, and between homosexuals.^{28,29} The marks, single or multiple in nature, may be of varying degrees of severity, ranging from a mild marking of the tissues to deep perforation of the epidermis and dermis, and may be found on breasts, face/head, abdomen, shoulder, upper extremity, buttocks, female genitalia, male genitalia, legs, ear, nose and neck.^{30,31} Bite mark examination is the one aspect of forensic odontology requiring an immediate response by the forensic dentist. The marks fade rapidly, both in the living and in the dead, changing appearance in a matter of hours; delay in examination may result in the loss of valuable evidence. The forensic dentist is also responsible for the examination of the dentition of those suspected of bite mark perpetration.

The traditional way of identification of bite mark was the comparison of the dentition and the injury. As with the introduction of molecular biology to dental identifications, the use of DNA in bite mark was pioneered in an effort to eliminate the subjectivity associated with conventional analysis.³²

Child Abuse

Child abuse is a non-accidental trauma or abuse inflicted on a child by a caretaker that is beyond the acceptable norm of child care.³³ The head and facial areas are frequently injured in such cases. These areas are exposed and accessible and the face and mouth are considered representative of the whole being. Human bite marks are often seen in abuse cases, frequently accompanied by other injuries. Those found in infants tend to be on different locations from those in older children or adolescents, and reflect punitive measures. [34]The marks may be ovoid or semicircular. Bites from adults will often only mark clearly from one arch, while a child who has bitten will frequently mark with both arches. Bites may be aggressive or sexual, the latter occasionally displaying suck marks. However, it is

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important not to overlook the fact that the child may have bitten itself or had the arm or hand forced into the mouth to silence it.

Future of Forensic Odontology in Hong Kong

In recent years, more and more civil cases require the expertise from forensic odontology. Apart from assessment on personal injury, cases like food complaint cases from the government departments³⁵, or from the defendants³⁶ (incomplete). It is interesting to know that the Dental Service of the Department of Health of HKSAR government does not provide any expert witness service to the prosecutors of the respective departments. All cases finally lead to "no evidence to offer" from the prosecutor side and hence the government has to pay the cost of defendants which can be up to millions.⁶

Globally, other than Hong Kong, the recent spate of terrorist attacks and natural disasters in which there have been multiple fatalities has reinforced the need for trained, experienced forensic odontologists who have undergone training in DVI in order to co-ordinate the response to such events promptly and properly.³⁷ Higher qualifications can be obtained by examination from a diploma course from University of Melbourne; a diploma qualification from the Worshipful Society of Apothecaries of London and recently, a fellowship examination from the Royal College of Physicians of London. However, these qualifications will not be recognised by the Hong Kong Dental Council in the foreseeable future.

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Dental Side Effects of Oral Bisphosphonates

Dr. Albert MP Lee

BDS, MSc, FRACDS, FCDSHK(Paed Dent), FHKAM(Dental Surgery)



Dr. Albert MP Lee

Bisphosphonates are compounds used in the treatment of many skeletal disorders such as bone metastases, osteoporosis, Paget's disease, hypercalcaemia of malignancy and bone pain¹. The main pharmacological effect of Bisphosphonates is the inhibition of bone resorption, mediated by a decreased function of osteoclasts, inhibition of calcification and reduction of inflammatory reaction in the joints. Bisphosphonates are accumulated mostly in the bone matrix and especially under osteoclasts and this is the main reason for the primary effect of Bisphosphonates on bone surface and in osteolytic lesions where the number of osteoclasts is increased. Bisphosphonates is highly resistant to hydrolysis under acid conditions or by pyrophosphatases.

Little is known about the side effects and dangers of the long-term use of therapeutic doses of Bisphosphonates. There have been reports on gastrointestinal complications such as gastric and oesophageal erosions and ulcerations and cases of renal failure and acute tubular necrosis. A new complication of Bisphosphonates therapy administration, i.e. osteonecrosis of jaws also known as Bisphosphonates-associated osteonecrosis (BON) of the jaws, seems to be developing²⁻³.

Oral Bisphosphonates include alendronate (Fosamax, Merck), risedronate (Actonel, P&G), ibandronate (Boniva, Roche), tiludronate (Skeliv, Sanofi), and etidronate (Didronel, P&G) are commonly used in the treatment of osteoporosis in women in the years immediately following menopause⁴. These are commonly prescribed by physicians to patients and were widely used by post-menopausal women as self-prescribed drugs from drug-stores in Hong Kong. Many physicians, patients and even dentists do not know the dental side effects of these drugs especially after long-term administration. Avascular osteonecrosis of the jaws developed after simple tooth extraction is common (Figure 1, 2 & 3) and in severe cases, invasion of the adjacent vital structures may be the complications (Figure 4 & 5).

The management of osteonecrosis of the jaws includes surgical debridement to obtain a clear and bleeding margin after cessation of the Bisphosphonate therapy for several months (from 2 to 8). Long-term antibiotic therapy including clindamycin, amoxicillin and penicillin G is the treatment of choice after surgery depending on the microbiology culture of the defect. When prescribing these drugs, physicians must warn the patients to alert the dental practitioners whenever dental extraction is required.



Figure 1. Non-healing dental socket in the maxilla in a post-menopausal woman taking long-term Oral Bisphosphonates.

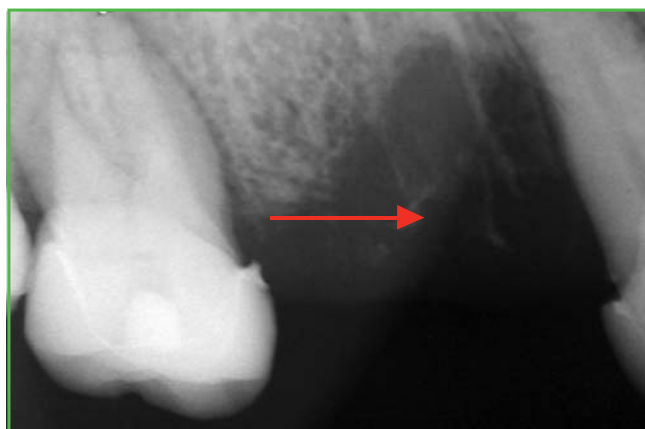


Figure 2. Avascular osteonecrosis developed around the alveolar socket after months of dental extraction.



Figure 3. Spontaneous healing of the dental socket after withdrawal of Oral Bisphosphonates therapy without any surgical intervention.

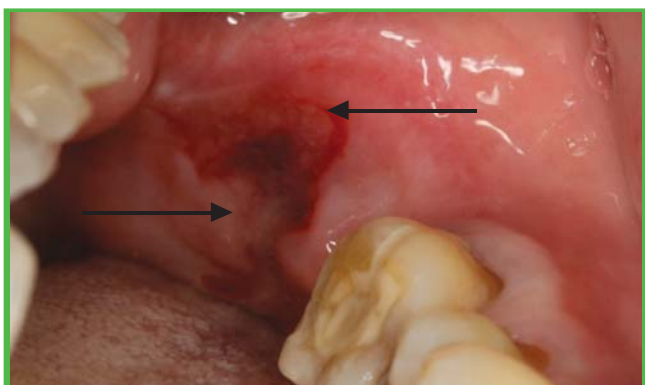


Figure 4. A 75-year-old woman taking self-prescribed Oral Bisphosphonates developed osteonecrosis of the mandible after extraction of the lower left wisdom tooth.

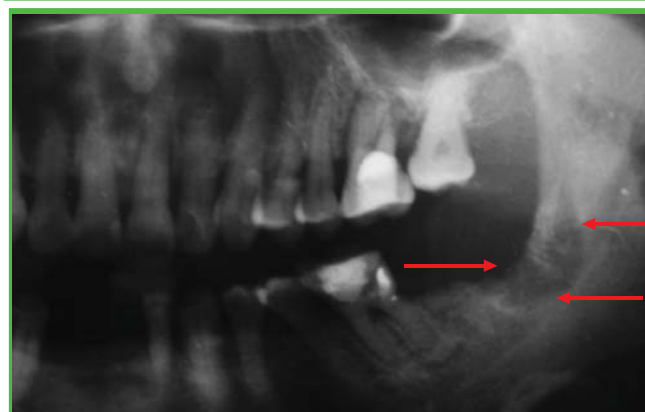


Figure 5. Radiograph showing the lesion of osteonecrosis extending to the ramus of the mandible and inferior alveolar dental nerve with symptoms of continuous dental pain and paraesthesia of the lower left lip.

Acknowledgement

The author wishes to thank Dr. Chau Kai Kin, Specialist in Oral & Maxillofacial Surgery for his inspiration in writing this review.

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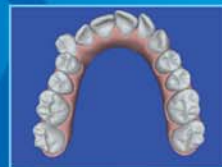


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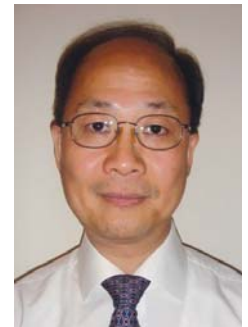




19th Convocation of the Royal Australasian College of Dental Surgeons Conjoint with the College of Dental Surgeons of Hong Kong

Dr. Francis SW Chau

MDS, FRACDS, MRD RCS(Ed)
19th RACDS Convocation Chair
Councillor, RACDS



Dr. Francis SW Chau

The 19th Convocation of the Royal Australasian College of Dental Surgeons (RACDS) conjoint with the College of Dental Surgeons of Hong Kong (CDSHK) was held from 30th May to 2nd June 2008 at the Hong Kong Convention and Exhibition Centre with great success. There were a total of 988 delegates attending the three-day scientific programme and trade exhibition. 244 were international delegates coming from twenty countries. This was the second time that the RACDS Convocation was held in Hong Kong, the last Convocation held in Hong Kong was almost two decades ago in 1989, when at that time there were only thirty-odd RACDS Fellows in Hong Kong compared to over 150 Fellows and Members currently.

The Opening Ceremony was held on 30th May. After the Academic Procession was led onto the stage by a cadet marching band (from the Sea School), there was also a traditional Lion Dance (sponsored by the Hong Kong Tourism Board) which involved the Presidents of both Colleges dotting the eyes of the Lion to represent the official opening of the Convocation Ceremony. This was followed by the President's (Dr. Neil Peppitt) Welcome Speech and subsequently, the Opening Address delivered by Dr. Alfred P. Y. Lam JP, Director of Health, Hong Kong, who talked about the past successful and future oral healthcare policies of Hong Kong.

The thirteenth Robert Harris Oration of the Convocation Ceremony was delivered by Mr. Anthony Wu, Chairman of the Hospital Authority Board. Mr. Wu had prepared an appropriate speech relating to dental health, but instead, he decided to speak about his very recent experience in providing medical support for victims of the Sichuan earthquake. It was a moving impromptu speech that the College is proud to record in the Annals.

At the Ceremony, there were a number of College awards made to individuals who have served or made an outstanding achievement in their profession. Dr. Yu Hang Suez Lam of Hong Kong was awarded the 2006 Kenneth J.G. Sutherland Prize. This prize is presented to the candidate who has gained the highest marks in Part I General Dentistry of the Final RACDS Examination. Congratulations to Dr. Yu!

The theme of the Convocation was "Bringing the World of Dentistry Together", hence besides the three Keynote Speakers, a wide range of local and international eminent speakers from more than 15 countries were invited to present lectures of the most contemporary



The Presidents of RACDS and CDSHK dotting the eyes of the Lion



Dr Alfred P Y Lam, Director of the Department of Health delivered the Convocation Opening Address



Mr Anthony Wu, Chairman of the Hospital Authority Board, delivered the 13th Robert Harris Oration at the Convocation Ceremony



dental knowledge at the Convocation. The three Keynote Speakers were for General Dentistry, Professor Ian Meyers from Australia; for Periodontics, Professor Magda Feres from Brazil and for Oral and Maxillofacial Surgery, Professor Buchbinder from the USA. Special thanks to the Scientific Programme Chairs, Professor Lim Kwong Cheung and Prof Edward C M Lo, both from the Dental Faculty of the University of Hong Kong, for organising a very interesting and comprehensive scientific programme which attracted delegates from twenty countries.

Social functions are always an integral part of the RACDS Convocations. This year the Convocation Dinner was at the Aberdeen Jumbo Floating Seafood Restaurant. There were more than two hundred delegates attending the dinner that evening and all were treated to a banquet of sumptuous fresh seafood. The decor and the atmosphere of the restaurant were most impressive to all overseas delegates. It had been raining during the four days of the Convocation but it was fortunate that the weather on the Fellowship Harbour Cruise Night was good enough to allow participants to enjoy the cruise as well as the spectacular laser light show at the Victoria Harbour. The final social programme was the Fellowship Lunch at the Hong Kong Football Club where excellent food and wine were served and Fellows treasured the opportunity to mix and meet with new and old dental colleagues during the luncheon.



Convocation Dinner at the Aberdeen Jumbo Seafood Restaurant

I would like to take this opportunity to thank the President of the CDSHK, Dr. John Ling and his College for the full support of the event. Special thanks to the Department of Health and Dr. Joseph Chan, Consultant-in-charge of the Civil Dental Service for sponsoring 120 dental officers to participate in this Convocation.

I would also like to thank all members of the Organising Committee who dedicated numerous hours to the preparation of the Convocation to ensure the whole event was carried out as successful as possible. The Organising Committee members are Vice-chair, Dr. Albert Lee; Hon Secretary, Dr. Danny Low; Hon Treasurer, Dr. C K Lee; Scientific Programme Chairs, Prof. Lim Kwong Cheung and Prof. Edward C M Lo; Social Programme Chair, Dr. William Yung; Advisor, Dr. Michael Tsui; Region Coordinator, Dr. Rony Cho;

Committee members, Dr. Edmond Pow, Dr. Siu Fai Leung and Dr. Sai Kwing Chan.

Special thanks to the whole Council of the RACDS for their constructive input and support, to the College office staff headed by the CEO, Mr. Stephen Robbins, for their assistance in clerical support and thanks must also be given to the Convocation secretariat, the Hong Kong Productivity Council, members include: Mr. Arnold Poon, Ms Gigi Chui, Ms Katrina Yeung, Ms Bigi Lam and Mr. Timothy Lee.

We greatly appreciate the Commerce and Economic Development Bureau of the Government of the HKSAR being the event's major sponsor and Colgate as the major trade sponsor of the Convocation and providing the Young Lecturer Award. Thanks also to all trade exhibitors for their generous support of the Convocation in providing a comprehensive trade exhibition.




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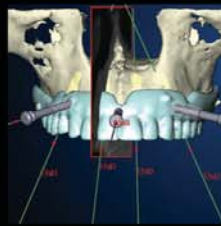
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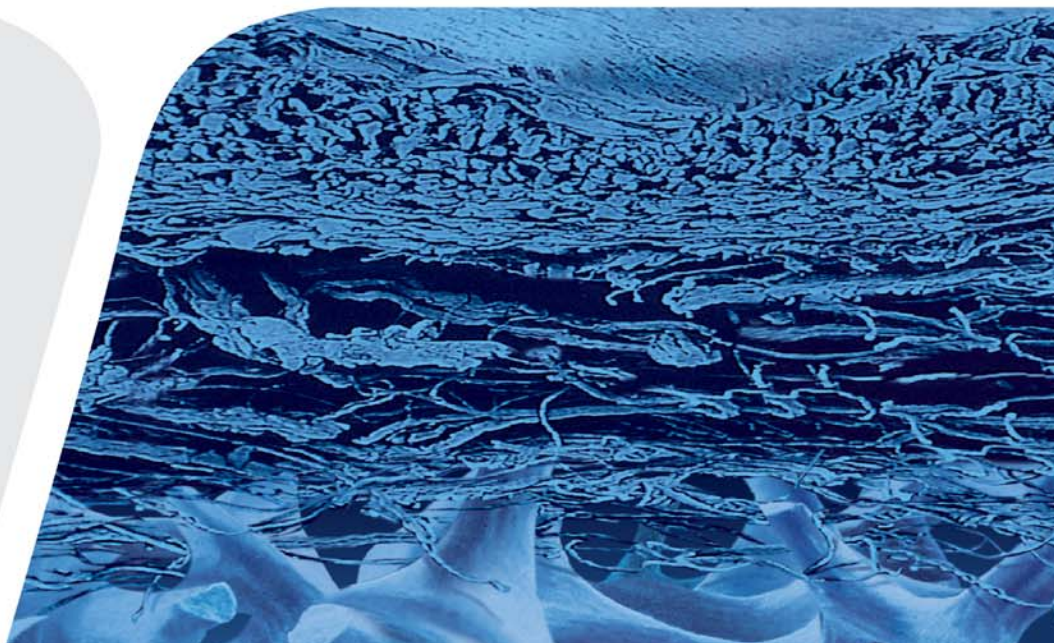
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Are Flying, Anaesthetics and Music Related?

Dr. William KP Lam

MDS, BA, LLB, BDS, GDLP, FRACDS, FRACDS(DOS), ARIArb, AHKIArb.



Dr. William KP Lam

My previous career of 19 years was in Oral and Maxillo-Facial Surgery until I took up Law. But I am not writing about either now.



I took up training in flying single-engine light aircraft in 1977 in a secondary airport called Parafield Airport in South Australia. This was (I am not sure whether it still is) where Cathay Pacific trained its pilots up to twin-engine level. The first time my flying instructor took me up I was so nervous I held onto the control wheel like grim death with my totally soaked sweaty hands. Within 10 minutes my instructor turned off the engine in mid-air, leaving the propellers sitting absolutely still in front of my eyes! After he showed me the plane did not drop out of the sky he told me to re-start the engine, which I hurriedly did! Actually I only reached the "Restricted Private Pilots Licence" level, which was a long way off from Commercial Pilots Licence and Air Transport Pilots Licence. But I was totally immersed in flying while I was engaged in my Oral Surgery practice and consulting for the Royal Adelaide Hospital. I went flying if the afternoons were not taken up with consultations or operating theatre, I went flying in the weekends, I studied the required Theory of Flight in order to pass written examinations, and I had bought more than one radio which could be tuned to receive air bands. In those days one could turn on a radio while flying as a passenger, and I used to listen to the Captains speaking to control towers whether in Australia, Hong Kong or overseas. So I knew when we were told to circle and wait for our turn to descend further, or turning to final for landing. I even knew we had to abort a landing just seconds before touchdown in San Francisco one evening, which incident I discovered afterwards by speaking to the Captain at the luggage carousel who told me he decided to abort because he could see another plane on the runway as he was about to land!

Now for the second activity. As part of my post-graduate training in Oral and Maxillofacial Surgery I had to attend the Department of Anaesthesia and Intensive Care for 7 months (full-time) in the Royal Adelaide Hospital back in the 1970's. My duties included being the actual anaesthetist in various operations including General Surgery and of course Oral Surgery. My duties also involved the administering and monitoring of intravenous sedations, and the taking of arterial blood samples in the Intensive Care Ward for the analysis of blood gases. I found myself saying to other people "If I had not become an oral surgeon I would have chosen to be an anaesthetist". Had I been properly qualified in medicine and anaesthetics I would definitely have loved to be an anaesthetist full time. But I had not realised at the time why these activities were so attractive - independently.



Baroque Period (1800-1850) and a little bit of performance in public. By the time I graduated with the BA degree I had traded-in the upright piano for a "small grand" piano (sounds like a contradiction in terms). But I did not know I would yet acquire another grand piano which was to cost me a fortune. In the afternoon of a fine day I was asked by a friend to select a piano for her son. But while the salesperson was explaining things to my friend, I saw three grand pianos placed inside an exquisite "special room" in the music shop, and so decided to lay my hands on them to give a try, with the permission of the salesperson. It was after sampling the Steinway & Sons that I could not sleep for the next three nights. And it was only the smallest of this concert hall brand of pianos, a Model "O", being only 6 foot deep. But I was completely taken in by its luscious, beautiful, absolutely mellow and strong tone, especially at the bass, typical of Steinways. After three sleepless nights I knew I must use up every dollar of my only term-deposit investment account, together with



trading-in my first "small grand" piano, in return for this Steinway. However, even though the purchase almost bankrupted me, I have not regretted it to this very day. You can see this Steinway to your left in the picture. The Steinway Model B to your right, 7.5 foot, two models short of the full size 9-foot Model D on concert platforms, was bought second-hand subsequently.



Is there a common thread among the three activities? You might have figured it out already, yes, it is that all three demand intensive pre-activity preparation, and once you have started, you cannot stop because of the intra-activity time factor. Any mistake once you have started is disastrous.

I realise many things in this world require good preparation, but many things are forgiving. If you deliver a public speech but make a mistake you can always say "Actually what I meant was" or "I should have reversed the order of those two slides" and the

audience will still get your full message. If you are leading a hiking party but you walked the wrong path, you can always say "Sorry folks, the turn-off was 20 metres back so we have to backtrack slightly". However if you are about to fly an aeroplane but wrongly calculate your centre of gravity, and take off, then find the aircraft tilts upwards, stalls, then drops out of the sky tail first, what can you do then? If you have omitted to turn on the heater of your air-speed indicator inlet and find it has iced (even partially) so that you think your aircraft is flying at a safe speed when it is about to stall, what happens then?

On the other hand, if you have put all your necessary anaesthetic induction and maintenance drugs and gases in order, and reversants and resuscitation drugs properly on the tray, with the ampoules open and syringes loaded and their needles inserted into the proper ampoules, like flying, if all goes well you will have a smooth day, but if something goes wrong, at least you are prepared.

If you are playing music in front of people, once you start, like flying, you cannot stop. If you have not prepared your piece 100% well, your poor playing will show. Your tempo must be accurate, and your expression must be convincing, or your audience will be disappointed. And there is definitely no room for "Oops! I made a mistake in this bar! Let me start again!"

** William Lam Kui-Po is a Magistrate in the Hong Kong Judiciary, from which he will be retiring in 2009, having served in that capacity for 9 years. He was first an Oral Surgeon, then a Barrister in private practice in Australia, then a Legal Aid Counsel in Hong Kong, then a Government Counsel in Public Prosecutions in Hong Kong before becoming a Magistrate.*

The Federation Annual Dinner 2008

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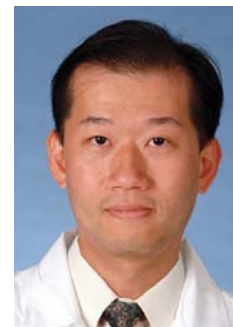


Dental Quiz

Dr. Shiu-yin Cho

BDS, MDS, FRACDS, FHKAM

Senior Dental Officer, Fanling School Dental Clinic, Department of Health.



Dr. Shiu-yin Cho



The case is an eight-year-six-month old boy in mixed dentition. All his permanent incisors and first molars have erupted. Yellowish demarcated opacities with mild enamel breakdown are seen in his upper right permanent first molar. All the other teeth are sound. His birth, peri-natal and medical histories are all unremarkable.

Questions:

1. What's the name of this dental condition?
2. What's the aetiology of this condition?
3. Why is this anomaly clinically important?
4. What's the prevalence of this condition in Hong Kong Chinese children?

(See P.37 for answers)



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Melamine Tainted Milk Products - Situation in Hong Kong

Dr. Siu-fai Lui

MH, MBChB (Manc UK), FRCP (Edin, Glasg, Lond), FHKCP HK, FHKAM (Medicine) HK
*Consultant (Quality and Risk Management), Hospital Authority, Hong Kong
 Chairman, Hong Kong Kidney Foundation*



Dr. Siu-fai Lui

Events So Far

On 11 September 2008, the media began to report an outbreak of kidney stones in infants and young children in China Mainland. In some cases, the bilateral kidney stones caused complete obstruction of the urinary tract leading to acute kidney failure. There were 3 deaths. Many brands of infant formula were heavily contaminated with melamine. As of October 15, over 54000 cases have sought treatment in the Mainland, with 5824 cases still under treatment in hospitals, while 43603 cases have been discharged home.

As Hong Kong is so closely inter-connected with the Mainland, the Hong Kong SAR Government, medical professionals and parents were concerned that infants and young children in Hong Kong, including those residing in the Mainland, may be affected by melamine tainted milk products (MTMP). As of October 16, 40042 infants / children have attended the Designated Clinics (DCs) set up by Hospital Authority (HA) for initial assessment and 11485 cases were subsequently referred to the 9 Special Assessment Centres (SACs). So far, 3 cases of kidney stones were detected at the SACs. With 5 other cases detected by other centres, a total of 8 cases of stones with a history of consumption of MTMP have been reported to HKSAR's Centre for Health Protection (CHP).

It is now clear that the widespread and severe outbreak of melamine related kidney stones observed in the Mainland has not occurred in Hong Kong. The heavily contaminated milk and milk products were not distributed in Hong Kong.

Melamine Contamination, Toxicology, Health Effects

Any amounts of melamine should not be added into food. However, as it is widely used in plastics, dishware, adhesives, molding compounds, coatings and flame retardants, a tiny amount of melamine may be found in food as a contaminant. The problem in the Mainland was fraudulent adulteration to boost the apparent protein content of milk. Melamine levels of up to 2563 mg/kg were detected in some milk products. According to Sanlu Group, contaminated milk was used in the manufacture of powdered infant formula processed before August 6 and tainted milk powder has also been used in the manufacture of a number of other products. Hence the detection of melamine in other milk related products was reported across many parts of the world.

Melamine is not metabolised and is rapidly eliminated in the urine. No human data are available. In animal feeding studies, high doses of melamine have an effect on the urinary bladder, causing inflammation, formation of stones and crystals in urine. Animal studies have generally not shown any renal toxicity or the formation of kidney stones. However, a combination of melamine and cyanuric acid does cause renal toxicity as observed in the earlier outbreak of acute renal failure in cats and dogs. It appears that melamine and its structural analogues, such as cyanuric acid, may act together to form crystals. The crystal formation is concentration dependent and likely to occur only at high-dose levels. So far, the presence of cyanuric acid has not been confirmed in the current event in the Mainland.

Infants and young children are highly susceptible as milk is their major food and the amount of melamine intake per body weight is much higher than that of adults. With exposure to a very high melamine level (e.g. 2563 mg/kg) for a sustained period of time, it is not surprising there is stone formation.

Health-based Guidance Values and Risk Assessment

Following the pet food incident in 2007, the US FDA has published an interim safety/risk assessment and has established for melamine a tolerable daily intake (TDI) of 0.63 mg/kg bw/day. The European Food Safety Authority has adopted a TDI of 0.5 mg/kg bw/day.

Considering a TDI of 0.5 mg/kg bw/day, this would allow a 50kg person to a tolerable amount of 25 mg melamine per day. Assuming the person would drink one litre of milk per day, this would indicate that the TDI would be reached at a level of 25 mg melamine per litre of milk. Considering a 5kg infant, the TDI would be 2.5 mg per day. This amount would be reached when consuming 750 ml liquid (or reconstituted) formula if contaminated at a level around 3.3 mg/l (ppm).

HKSAR has taken a lead to define the legal limit for melamine in food. Under the amended Harmful Substances in Food Regulation (Cap. 132 AF), milk and food intended to be consumed principally by children under the age of 36 months and any food intended to be consumed principally by pregnant or lactating women shall not contain melamine exceeding 1 mg/kg. For other food, melamine level shall not exceed 2.5 mg/kg. Subsequently Canada and New Zealand have adopted the same standard.



HKSAR's Centre for Food Safety (CFS) has adopted a TDI of 0.63 mg/kg bw/day for adult and 0.32 mg/kg bw/day for a child under age of 3, as children are more sensitive to melamine.

Hospital Authority Response Plan - Screening and Treatment Centres

To assess the situation in Hong Kong and to reassure the public (parents), the Food and Health Bureau and HA set up a response plan to screen infants and children under the age of 12. On September 20, a designated clinic was set up at the Princess Margaret Hospital. However, as many MTMPs were detected in the Mainland and Hong Kong, the demand for screening escalated very sharply and acutely. HA set up a Task force to handle the "crisis" including an Executive panel, Experts group, Task group and Communication panel.

Eighteen DCs were quickly set up at HA's GOPCs, commenced operation on September 23 to meet the demand and expectation. At the DCs, history of consumption of MTMP and renal symptoms were assessed. Urine analysis was performed. If an infant / child has continuous (one month) consumption of MTMPs from the Mainland or those listed by HKSAR CFS and / or symptoms of renal stone / disease / failure, he /she is referred to the SACs for further investigation, including blood tests* and ultrasound of the kidneys (* from October 10, blood test for creatinine is only indicated for cases with positive history or findings). Suspected or confirmed MTMP-stone cases were referred to the Paediatric Renal Centre at Princess Margaret Hospital for investigation and treatment so as to gain experience in managing and study such a new disease entity.

Clinical Picture

For surveillance purposes, the reporting criteria of a suspected case to CHP is a child presenting with renal disease including urinary calculi and with history of history of exposure to melamine containing dairy products. On October 17, CHP refined the case definitions for suspected case, probable case (a suspected case melamine intake exceeding the defined TDI for a significant duration) and confirmed case (with laboratory confirmation).

As of October 16, out of the 11485 cases who have undergone detailed assessments at the SACs, 3 cases of stone were detected by ultrasound scan (stone size > 4mm). Five other cases were detected by other centres. The clinical picture of these 8 cases was very mild. Renal function was normal. Apart from one case which required lithotripsy, the other cases were treated conservatively (with extra fluid). In one of the cases, the stone had disappeared (see table 1).

A Hong Kong delegation has visited Hebei and Beijing to gain first hand experience in the investigation and treatment of MTMP related stones. Two third of the cases were associated with consumption of Sanlu. All the serious cases were associated with Sanlu Milk products. There is a dose-dependent phenomenon.

These MTMP related stones are relatively soft and can pass out spontaneously with measures to increase urine flow + alkalisation of urine. Only a few patients required surgical intervention. Cystoscope retrograde intubation into the ureter may dislodge the stone / sands. Percutaneous kidney drainage and removal of stones were required in some cases. Extracorporeal shock wave lithotripter is not used as application is difficult and hazardous in infants / children. Once the urinary obstruction is relieved, the general condition and renal function are back to normal.

Issues

(1) One discussion point is case definition, as it is not easy to accurately quantify the amount of MTMP taken. There is a background noise of a very small number of kidney stones being detected in children every year. Another issue requiring further deliberation and follow up is possible long term renal effects. Some form of long term follow-ups is necessary for a selected group of high risk patients (yet to be defined). HKSAR FHB has set up an Expert Panel on Melamine Incident to formulate effective procedures and methods for medical assessment and treatment, and to propose follow-up measures on medical and health services.

(2) Mass health screening inevitably detected false positive cases. A significant proportion of the initial urine analysis was positive for proteinuria and/or haematuria detected by albutix and haemastix, but was negative on further testing by repeat test, urinary protein determination and urine microscopy. Nevertheless, false positive finding generates additional work load and some degree of anxiety for the parents.

(3) This massive screening programme mounted by the Hospital Authority is a heavy burden on the already stretched resources of the Hospital Authority. Many staff have to take on extra duty outside office hours and during weekends to clear up the waiting list. Over 10,000 ultrasound scans have been performed, yet another 10,000 cases are awaiting ultrasound scan. Although the attendance at the DCs has subsided considerably, it will take considerable resource and time to clear the backlog of investigations.

(4) It is now clear that fortunately the children in Hong Kong have not been exposed to the batch of very toxic MTMPs. However as it is important to ensure the health of our children, there was no option but to mount such a drastic and big scale response to a health scare for Hong Kong.

[Information and data are as available on 16 October 2008 and is subject to change and update]

Table 1: Clinical Picture of the 8 Cases Reported to CHP

Detection by:	3 cases were detected at Special Assessment Centres 5 cases were referred from other sources (1 clinic, 2 private hospital, 2 diagnosed in the Mainland)
Age:	2.5, 2.5, 3.5, 4, 8, 9, 10 and 10 years
Place of residence:	5 cases live in Hong Kong, 3 cases live in the Mainland
Clinical picture:	mild, asymptomatic in 5 cases, 3 cases with dysuria / haematuria
Renal function:	All normal
Diagnosis by:	Kidney stone detected by USS 6 cases with single stone, 2 cases with 2 stones
Treatment:	7 cases were managed with conservative treatment (fluid intake), 1 case had lithotripsy.
Current status:	6 cases were discharged, 2 cases under investigation In 1 case stone had disappeared.



The Urological Aspect of Melamine Tainted Milk Product (MTMP)-Related Stone Disease

Dr. Ming-kwong Yiu

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Consultant Urologist, Princess Margaret Hospital
President, Hong Kong Urological Association



Dr. Ming-kwong Yiu

The problem of melamine tainted milk products (MTMP) has drawn a lot of public attention. It started after the Chinese media reported, in early September, that the Sanlu brand infant formula produced by the Hebei-based Group was contaminated with melamine. The urinary stones, discovered after taking these contaminated milk products, led to a major clinical problem. These patients require expert medical care from specialists of the Paediatric, Radiology and Urology disciplines.

From the preliminary experience of the affected infants, these stones could be of various sizes. We still rely on ultrasonography as the main diagnostic tool. The treatment plan implemented in the Mainland has already been posted on the WHO web site (http://www.who.int/foodsafety/fs_management/infos_an_events/en/index3.html). This could be used as a good reference before the local treatment guideline is ready for use. In the management of this clinical entity, we still rely on our general urological treatment principle. Small stones which do not have complications are managed conservatively in the initial phase. The patient is advised to stop taking contaminated milk products, increase fluid intake or fluid infusion and correct abnormal biochemical parameters, if any. Mainland specialists found from various sources that most of these "stones" are in fact soft, loose and sand-like. They are very likely to be passed out with urine. Urological intervention should be the treatment of choice if medical treatment is not effective, especially when there is significant obstruction to the urinary system. The most employed minimally invasive treatment of choice is cystoscopy and retrograde catheterisation (C&R) of the obstructed ureter. This includes cystoscopic guided catheterisation of the ureter with catheter. Manipulation of the obstructing stone/sand with the ureteric catheter could be able to loosen the obstructing stone and subsequent passage of the fragments. The obstructed urine should be able to pass out after the obstruction has been relieved. Stenting of the ureter with double j catheter may be needed if the obstruction could not be entirely resolved only with manipulation. Percutaneous kidney drainage may rarely be needed if the above approach fails. Big stones with no significant obstruction will be followed up and reviewed at regular intervals.

This disease is a new entity to us. The clinical course of this stone disease remains unclear. We still could not decide, at this juncture, whether early interventions for

definitive stone treatment are better than conservative approach. Procedures like Percutaneous stone removal, or in selected cases, with Extracorporeal Shock Wave Lithotripsy (ESWL) have been tried with success. If we choose to wait, how long should we wait before we decide that conservative treatment has failed? Will these stones be able to be dissolved with conservative measures, or grow in size with time? We probably need further follow ups and observations for that.

From the statistics of the Hospital Authority, an average of 6 new cases of renal stones in the paediatric age group (kids less than 12 years old) are reported each year. At the time of writing, there are 8 suspected cases of Melamine Tainted milk products-related renal stone reported to the Centre for Health Protection (CHP) in Hong Kong. We expect a few more are coming. However, most of these cases are just having uncomplicated stones and are on conservative treatment now. The question is whether these cases are genuine Melamine renal stones or are we just picking up all those incidental renal stones from the paediatric community by this massive screening? Unless we could detect significant amounts of melamine in their stone specimen, we couldn't be able to confirm that their stone disease is caused by melamine contamination. We need to be very careful about that.

With those calcified and radio-opaque renal stones among these cases, one may treat it as if they are treating the urinary stone diseases they encounter in their everyday practice before. Initial metabolic screening, conservative treatment or followed by extracorporeal shock (ESWL, Fig.1) for the small ones; Percutaneous removal (PCNL, Fig. 2) for the large ones; Ureterscopy for the obstructed ureteric stones (URSL, Fig.3) and cystoscopic removal/lithotripsy for the bladder stones (Fig. 4) etc. All these methods have already been proven to be feasible and effective in expert hands for our Paediatric patients.

Last but not the least, I would like to look more on the positive side of this story. With more public awareness on renal stone disease and on stone prevention methods, hopefully we would be able to decrease the incidence of renal stones. Then we could at least be partly relieved on our daily workload in public urology clinics and wards, which are already much overcrowded!

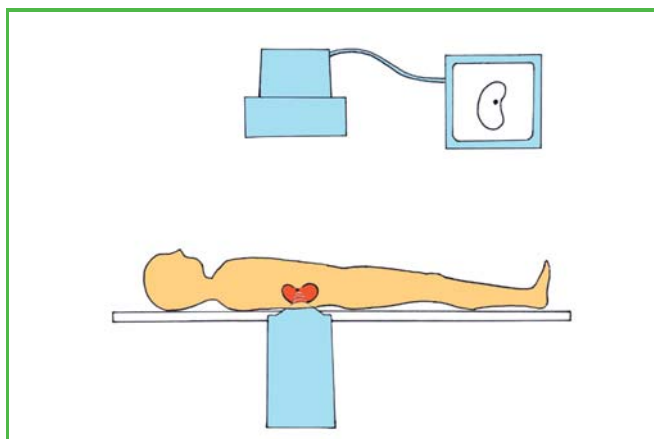


Fig.1 ESWL

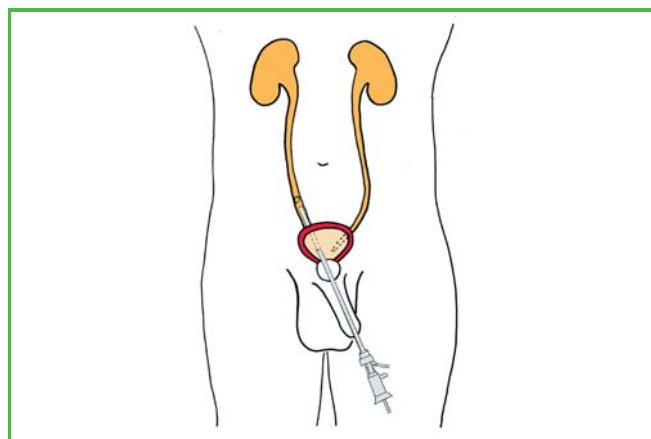


Fig.3 URSL

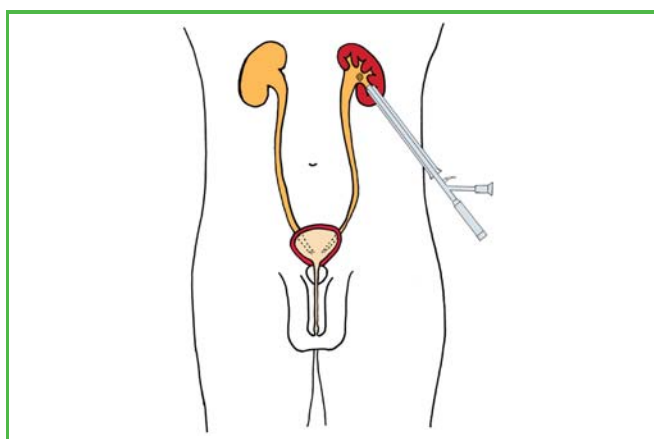


Fig.2 PCNL

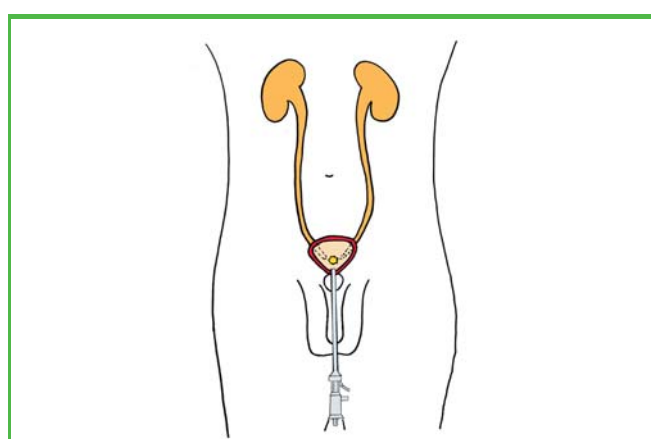


Fig. 4 CYSTOSCOPY



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2 SUN 2:00 pm 2:00 pm 7:30 pm (9,16,23,30)	HKMA Structured CME Programme at Queen Elizabeth Hospital Year 08/09 (VIII) - Psychiatry Organised by: The Hong Kong Medical Association and Queen Elizabeth Hospital Speaker: Dr. W.K. LAM, Dr. Alfert TSANG & Dr. M.T. WONG # Lecture Theatre, G/F., Block D, Queen Elizabeth Hospital, Kowloon	Miss Viviane LAM Tel: 2527 8452 (Registration fee is required) 3 CME Points
	Joint Professional Tenpin Bowling Tournament Organised by: The Hong Kong Medical Association Chairman: Dr. Anthony HO # Olympian City Super Fun Bowl	Ms. Dora HO Tel: 2527 8285
	HKMA Tennis Tournament Organised by: The Hong Kong Medical Association Chairman: Dr. Hilton KOO # Kowloon Tong Club	Ms. Dora HO Tel: 2527 8285
4 TUE 8:00 pm - 10:00pm	FMSHK Officers' Meeting Organised by: The Federation of Medical Societies of Hong Kong # Gallop, 2/F., Hong Kong Jockey Club Club House, Shan Kwong Road, Happy Valley, Hong Kong	Ms. Paulina TANG Tel: 2527 8898 Fax: 2865 0345
6 THU 1:00 pm (13,20,27) 6:30 pm - 9:30 pm (6,13,20,27) 8:00 pm	HKMA TSWN/YL Community Network - Certificate Course in Vascular Diseases Organised by: HKMA Tin Shui Wai North Community Network, HKMA Yuen Long Community Network & Pok Oi Hospital Speaker: Dr. LEUNG Wai Suen Albert & Dr. SO Yui Chi # Harbour Plaza Resort City	Ms. Jo WONG / Ms. Tammy TAM Tel: 2527 8285 1.5 CME Points
	Certificate Course in Clinical Audit (Code No. TC-CA-0802) Organised by: College of Nursing, Hong Kong	Secretariat Tel: 2572 9255 Fax: 2838 6280 24 CNE Points
	HKMA Council Meeting Organised by: The Hong Kong Medical Association Chairman: Dr. H.H. TSE # HKMA Head Office, 5/F., Duke of Windsor Social Service Building, 15 Hennessy Road, Hong Kong	Ms. Christine WONG Tel: 2527 8285
7 FRI 9:00 am (8,9) 1:00 pm (14,19,28) 6:30 pm - 8:30 pm	Oxfam Trailwalker 2008 Organised by: The Hong Kong Medical Association Chairman: Dr. Francis CHOW & Dr. Janice TSANG # MacLehose Trail	Miss Dorothy KWOK Tel: 2527 8285
	HKMA Hong Kong East Community Network - Certificate Course in Common Psychiatric Problems in Our Community Organised by: HKMA Hong Kong East Community Network Speaker: Prof. CHEN Yu Hai, Eric # HKMA Dr. LI Shu Pui Professional Education Centre, 2/F., Chinese Club Building, 21-22 Connaught Road Central, Hong Kong	Ms. Tammy TAM Tel: 2527 8285 1 CME Point
	Seminar on Time Management (Code No. SMIG-04-08) Organised by: College of Nursing, Hong Kong	Secretariat Tel: 2572 9255 Fax: 2838 6280 2 CNE Points
8 SAT 2:30 pm (9)	Refresher Course for Health Care Providers 2008/2009 - Practical Occupational Therapy Tips for General Practice Organised by: The Hong Kong Medical Association and Our Lady of Maryknoll Hospital Speaker: Ms. Jane MAN # Training Room II, 1/F., OPD Block, Our Lady of Maryknoll Hospital, 118 Shatin Pass Road, Wong Tai Sin, Kowloon, Hong Kong	Ms. Clara TSANG Tel: 2354 2440
	10th BHME Organised by: The Hong Kong Medical Association # HK Convention and Exhibition Centre, Wanchai, Hong Kong	Ms. Candy YUEN Tel: 2527 8285
12 WED 7:30 am	Hong Kong Neurosurgical Society Monthly Academic Meeting - Management of Lumbar Degenerative Disease Organised by: Hong Kong Neurosurgical Society Chairman: Dr. SUN Tin Fung David Speaker: Dr. MAK Wai Kit # Seminar Room, G/F., Block A, Queen Elizabeth Hospital, Kowloon	Dr. Y.C. PO Tel: 2990 3788 Fax: 2990 3789 2 CME Points
13 THU 2:00 pm	HKMA Structured CME Programme with Hong Kong Sanatorium & Hospital Year 2008 (XI) Organised by: The Hong Kong Medical Association & Hong Kong Sanatorium & Hospital Speaker: Dr. KING Wing Keung, Walter # HKMA Dr. LI Shu Pui Professional Education Centre, 2/F., Chinese Club Building, 21-22 Connaught Road Central, Hong Kong	Miss Viviane LAM Tel: 2527 8452 (Registration fee is required) 1 CME Point
14 FRI 6:30 pm - 9:30 pm (21,28) 6:30 pm - 9:30 pm (21,28)	Certificate Course on Organization and Management in Healthcare (Code No. TC-OMH-0801) Organised by: College of Nursing, Hong Kong	Secretariat Tel: 2572 9255 Fax: 2838 6280 24 CNE Points
	Certificate Course on Palliative Care for Nurses (Code No. TC-PC-0801) Organised by: College of Nursing, Hong Kong	Secretariat Tel: 2572 9255 Fax: 2838 6280 24 CNE Points
18 TUE 1:30 pm	HKMA Tai Po Community Network - 聽障 - 聽力檢查及助聽器 Organised by: HKMA Tai Po Community Network Speaker: Dr. CHAN Wing Kwan # Grand Capital Banquet Hall	Miss Viviane LAM Tel: 2527 8452 2.5 CME Points
20 THU 7:00 pm - 8:45 pm 8:45 pm - 10:00 pm	FMSHK Executive Committee Meeting & Council Meeting Organised by: The Federation of Medical Societies of Hong Kong # Council Chambers, 4/F., Duke of Windsor Social Service Building, 15 Hennessy Road, Wanchai, Hong Kong	Ms. Paulina TANG Tel: 2527 8898 Fax: 2865 0345
	FMSHK & Foundation Annual General Meeting Organised by: The Federation of Medical Societies of Hong Kong # Lecture Hall, 4/F., Duke of Windsor Social Service Building, 15 Hennessy Road, Wanchai, Hong Kong	Ms. Paulina TANG Tel: 2527 8898 Fax: 2865 0345
22 SAT 3:00 pm (23) (23,24,25)	Sharing Session of HKMA Trailwalker 2008 Organised by: The Hong Kong Medical Association Chairman: Dr. Francis CHOW & Dr. Janice TSANG # HKMA Dr. LI Shu Pui Professional Education Centre, 2/F., Chinese Club Building, 21-22 Connaught Road Central, Hong Kong	Miss Dorothy KWOK Tel: 2527 8285
	Annual Scientific Meeting in Anaesthesiology - Mother, Baby and Anaesthesia Organised by: Hong Kong College of Anaesthesiologists & Society of Anaesthetists of Hong Kong Speaker: Various # Hong Kong Convention & Exhibition Centre, Wanchai, Hong Kong	Secretariat Tel: 2559 9973
	2nd Asian Preventive Cardiology & Cardiac Rehabilitation Conference cum 7th Certificate Course in Cardiac Rehabilitation Organised by: Hong Kong College of Cardiology Co-Chairman: Prof. LAU Chu Pak & Dr. LAU Suet Ting Speaker: Various # Hong Kong Convention & Exhibition Centre, 1 Expo Drive, Wanchai, Hong Kong	Secretariat Tel: 2527 8285 Fax: 2865 0943 Email: dorahkma@hkma.org Website: http://www.apccrc.com



Date / Time	Function	Enquiry / Remarks
23 SUN 1:30 pm (28,29,30)	HKMA Family Sports Day Organised by: The Hong Kong Medical Association Chairman: Dr. Kingsley CHAN and Dr. Cissy YU # Stanley Ho Sports Centre Human Dignity in Modern Medicine & 14th Congress of Asian Federation of Catholic Medical Associations Organised by: The Guild of St. Luke, St. Cosmas and St. Damian Hong Kong Chairman: Dr. Peter AU YEUNG Speaker: Prof. Fr Louis Aldrich SJ & Prof. Luke Gormally # Catholic Disease Centre	Ms. Dora HO Tel: 2527 8285 Congress Secretariat Tel: 2363 0598 Fax: 3764 0579
30 SUN 2:00 pm - 9:00 pm	The Federation President Cup Soccer Five Tournament 2008 Organised by: The Federation of Medical Societies of Hong Kong Chairman: Dr. Kingsley CHAN, Dr. LIU Wing Hong & Mr. Nelson LAM # Ying Wa College, 1 Ying Wa Street, Shamshuipo, Kowloon	Ms. Karen CHU Tel: 2527 8898 Fax: 2865 0345

Meetings

20-22/2/2009	CardioRhythm 2009 Organised by: Hong Kong College of Cardiology & Chinese Society of Pacing and Electrophysiology Co-Chairman: Prof. LAU Chu Pak Enquiry: Secretariat Tel: 2899 2035 Fax: 2899 2045 Email: info@cardiorhythm.com Website: http://www.cardiorhythm.com
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Society News



News from Member Societies:

Hong Kong Institute of Medical Laboratory Sciences Ltd

Updated office-bearers for the year 2008-2009 are as follows: President: Mr. Alex Wai-chun LI; Honorary Secretary: Mr. Wing-yin HO; Honorary Treasurer: Mr. Bosco Wan-lung YAU

Hong Kong Society of Critical Care Medicine

Updated office-bearers for the year 2008-2009 are as follows: President: Dr. Wing-wa YAN; Honorary Secretary: Dr. Alfred Yan-fat CHAN; Honorary Treasurer: Dr. Osburga Pik-kei CHAN

The Hong Kong Paediatric Society

Updated office-bearers for the year 2008-2009 are as follows: President: Dr. Chak-man YU; Vice Chairman: Dr. Kevin LIU; Honorary Secretary: Dr. Godfrey Chi-fung CHAN

The FMSHK would like to send its congratulations to the new office-bearers and look forward to working together with their societies.

Answer to Clinical Quiz

Answer :

1. This dental anomaly is called Molar Incisor Hypomineralisation (MIH) and is defined as hypomineralisation of systemic origin of one to four permanent first molars, frequently associated with affected incisors. This description emphasises the fact that permanent first molars are always involved in those affected, and often there is a combination of molars with demarcated opacities of the incisors. On the other hand, opacities only on the permanent incisors may indicate defects from other origins and should not be referred to as MIH. Clinically the enamel defects can vary from white to yellow/brownish but they always show a sharp demarcation between the affected and sound enamel. The tooth surface enamel initially develops to a normal thickness, but can chip off under masticatory forces.
2. The aetiology of MIH is not clear. Both genetic and environmental factors are likely involved.
3. A high impact on treatment need resulting from MIH molars has been reported in low caries prevalence areas. The treatment need of children with MIH is often more than two-fold of that of general children population of similar age.
4. The prevalence of MIH in Hong Kong Chinese children has been estimated to be about 3%.

Dr. Shiu-yin Cho

BDS, MDS, FRACDS, FHKAM

Senior Dental Officer, Fanling School Dental Clinic, Department of Health.

Think all toothpastes work the same?

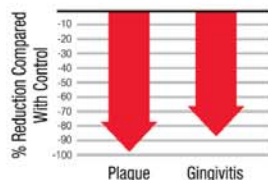
Take a deeper look.

Colgate Total is proven to fight oral inflammation. Scientific evidence suggests a strong association between oral inflammation and systemic diseases, such as cardiovascular and other diseases throughout the body.¹⁻⁴

Colgate Total contains a unique antibacterial formulation that fights oral inflammation in two important ways^{1-3,5,6}

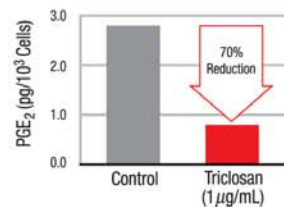
Kills plaque bacteria for a full 12 hours⁵

Up to 98% More Plaque Reduction^{1,2*};
up to 88% More Gingivitis Reduction^{1,2*}



Reduces the level of inflammatory mediators that may be associated with systemic health^{3,4,6}

70% Reduction in PGE₂—a Key Mediator^{6†}



“Recent evidence suggests a strong relationship between periodontal inflammatory disease and systemic diseases such as cardiovascular disease.”⁷

—Dave, et al. *Compendium*. 2004.



**12-Hour Antibacterial *plus* Anti-Inflammatory Protection for Good Oral Health.
And, Good Oral Health is Integral to Good Overall Health.**

1. Panagakos FS et al. *J Clin Dent*. 2005; 16 (Suppl): S1-S20. 2. Davies RM et al. *J Clin Periodontol*. 2004; 31:1029-1033. 3. Gaffar A, et al. *J Clin Periodontol*. 1995; 22:480-484. 4. Scannapieco FA. *Compend Contin Educ Dent*. 2004; 25; 7(suppl 1) :16-25. 5. Amornchat C et al. *Mahidol Dent J*. 2004; 24 :103-111. 6. Moeer T et al. *J Clin Periodontol*. 1996; 23:927-933. 7. Dave S et al. *Compend Contin Educ Dent*. 2004; 25; 7 (Suppl 1):26-37. *vs ordinary fluoride toothpaste. †in vitro.