BUMPER ISSUE 2020

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MALAYSIAN PRIVATE DENTAL PRACTITIONERS' ASSOCIATION

ACRYLIC ON CANVAS PAINTING (2019)
BY : DR. RUBINI ARASU @ RubyCanvas

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Malaysian Private Dental Practitioners Association

COVER DESIGN

ACRYLIC ON CANVAS PAINTING (2019)
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PROBE 2020; PREPARED & COMPILED
BY DR.RUBINI ARASU & DR.JAYASEEL RAMACHANDRAN

PRESIDENT'S MESSAGE....

Dear Friends & Members,

It is indeed a great honour and privilege to have served as President of MPDPA for the past 2 years. I look forward once again to my new term to serve you better and to continue creating awareness and recognition of MPDPA.

During the course of my term, MPDPA had organised many events. One of our main event being the 5th MPDPA ASEAN DSA Congress & Trade Exhibition 2019 which was held at the Royal Selangor Club. We had tremendous support from our GPs and their participating DSAs, our fellow Ministry Of Health delegates and not forgetting our traders ; Pureen, GSK, Colgate and GC Asia as well. This event was a great success and I owe it to my Organising Chairperson Dr Foo Gaik See and the rest of my Committee Members. KUDOS!! to all of you and THANK YOU!

In September, MPDPA collaborated with the World Dentists Association headed by Dr.A.V.Arun and organised The World Dental Conference & Trade Exhibition 2019, themed "Future Trends In Dentistry". The aim of this conferences was to create a knowledge –sharing- platform in the field of Dentistry and also to create a global networking experience for our dental students and professionals. This prestigious event was officiated by Our Honourable Health Minister, YB Datuk Seri Dr Dzulkefly Ahmad. Other attending MoH VIPs were Dr Doreyat Bin Jemun, Principal Director of Oral Health and Dr.Mustaffa Jaapar, Assistant Principal Director Of Oral Health Division and Oral Health Programmes. Alongside this 2 day Scientific Conference, MPDPA also organized a Gala Dinner to honour and recognize our fellow Honorary Member Dr.A.Pathmanathan and Past President Dr.Arasu Rajaratnam for their contributions towards MPDPA and in the field of Dentistry in Malaysia with A Lifetime Achievement Award.

We have also been working hand in hand with The Ministry of Health, the Malaysian Dental Council and other Government bodies to look into matters concerning the Private Practitioners. Having said so, my Council Members and I were priviledged to have a Private Meeting with our Honourable Minister of Health, Malaysia YB Datuk Seri Dr Dzulkelfly Ahmad and the Director General Of Health, YBhg. Datuk Dr Noor Hisham Bin Abdullah to discuss the Dental Act and Regulations.

As the famous saying goes; " United We Stand, Divided We Fall".

All of MPDPA efforts, would not be possible without the continuous support from my Committee and Members of this Association. I do hope to get more support and participation from all Private Practitioners in the near future , so that united we can stand as one voice. And I do believe that with one voice we can make a difference, but many voices together we can make a change.

Thanking you

Mahendran,
Dr.P.Mahendran
MPDPA President 2019-2021.

"One voice can change a room, and if one voice can change a room, then it can change a city, and if it can change a city, it can change a state, and if it change a state, it can change a nation, and if it can change a nation, it can change the world. Your voice can change the world." — Barak Obama

JOIN US TODAY & TOGETHER LET'S MAKE A DIFFERENCE TO OUR PROFESSION !

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THE ONLY WAY TO DO GREAT WORK, IS TO LOVE WHAT YOU DO!

---STEVE JOBS

TIMING OF ORTHODONTIC TREATMENT FOR CHILDREN

Dr Sasil Poonnen BDS, MDS Orthodontist .

When is the optimal time to begin orthodontic treatment ?

There is no simple answer to this question.

The decision concerning the timing of orthodontic treatment depends on the nature of the problem and the need of the patient.

The management of orthodontic patients during primary, mixed and permanent dentition is discussed as below.

Primary dentition (6 months - 6 years)

Picture of a child with Class III malocclusion with an anterior cross bite.
There is no need to start the treatment during the primary dentition as the child's compliance at such an early age is not easy to accomplish.

However if any change is accomplished it is difficult to maintain till the permanent dentition.

Thus the best time to intervene for this condition is after the eruption of the permanent maxillary & mandibular incisors.

Mixed Dentition 6-12years

The mixed dentition starts with eruption of the first molar and mandibular central incisor referred to as the 6 year tooth.

This Picture shows an anterior cross bite , this condition needs intervention at the earliest as cross-bite restricts the free movement of the mandible and could lead to a permanent mandibular protrusion .

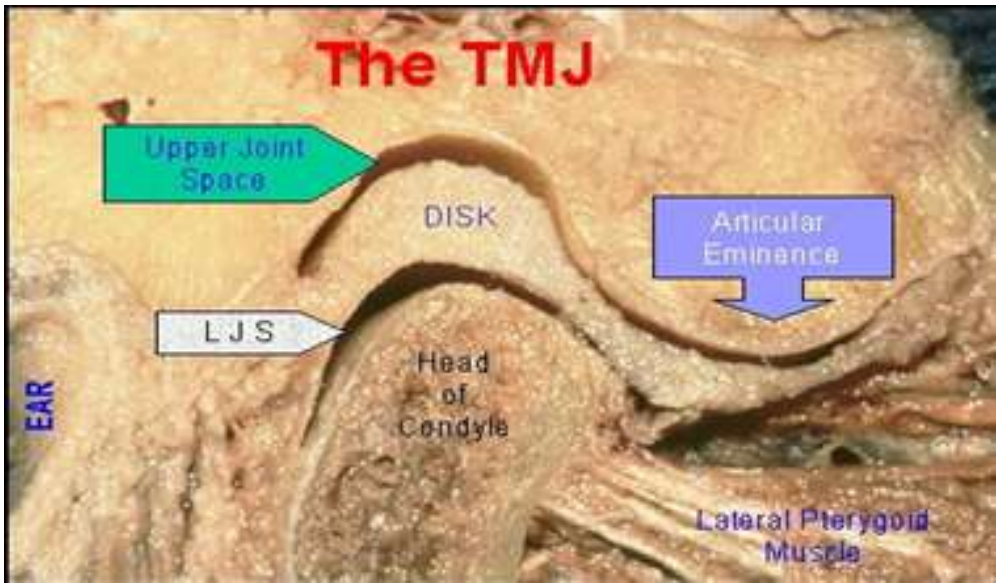
Treatment of anterior cross bite is one of the easiest malocclusion which can be treated at an early stage.

ThumbSucking

If thumb sucking continues after the eruption of permanent incisors ,then it needs to be corrected immediately .
If the habit continues for more than 6 hours per day it can lead to malocclusion.

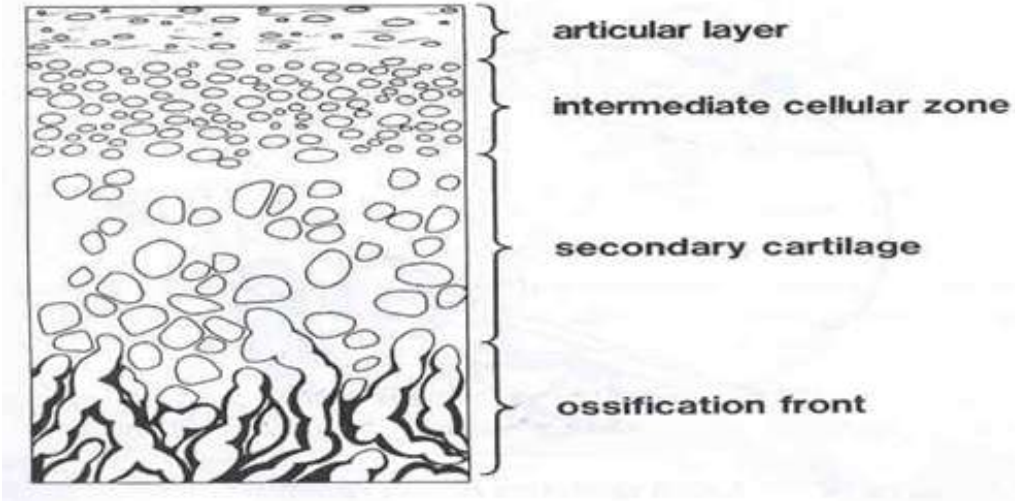
There is no need to start treatment earlier than 6 years as the eruption of permanent teeth could alter the malocclusion created.

Functional Appliance



Condylar cartilage in the mandibular condyle is a major site for postnatal growth . Growth of the condyle moves the head in a superior direction, this will push against the undersurface of the cranial base at the glenoid fossa, thus pushing the mandible downwards and forwards.

If the condyle is kept opened with a functional appliance during growth period , the cartilage is stimulated to grow and could lead to lengthening of the mandible.



Tissues in the condylar head are arranged in an unusual manner, the top most surface is covered by an articular layer which is fibrocartilagenous, followed by an intermediate layer of connective tissue and beneath this is the secondary cartilage and bone ossification area.

Class III

Frankel Appliance.

Treatment modalities in early diagnosis of Developing Skeletal Class III Malocclusion includes eruption of upper central incisors by means of using Face mask , Chin Cap or Frankel's Functional Regulator III or FR III.

Class II

Activator Appliance.

Treatment of developing class II malocclusion should be delayed until the circumpubertal period. i.e., till 11-13 years of age and is based on attainment of puberty.

The Timing of treating a class II and class III patient with functional appliance is very crucial and a two phase treatment with fixed appliance is mandatory.

The positive skeletal effect achieved by functional (jaw)orthopedics appliances need long term stability with optimal interdigitation of permanent teeth by fixed appliance therapy. This will establish an interlocking occlusion leading to better stability and treatment result over a longer period of time.

Fixed appliance treatment should only start when all the permanent teeth (anterior to the first molars) are fully erupted.

By having all the permanent teeth present , a predictable treatment duration can be provided; 2.5 – 3 years .

Decisions regarding extraction of teeth can only be made when all the teeth are present in the mouth.

Conclusion :

People with the same malocclusion do not have the same problem nor should they all be treated in the same manner.

Malocclusion is a problem that needs to be addressed at the level of the whole person and not purely based on our diagnosis and treatment plan.

Early Oral Cancer Detection can happen at the dentist.

We played our role and contributed a small fund towards the Oral Cancer Research & Coordinating Centre during their Annual Mouth Cancer Awareness Week.

MPDPA Committee Member, Dr.Rubini Arasu submitted her artwork (as shown) in show of support ,representing MPDPA in the Oral Cancer Awareness Poster Competition.

APRIL IS ORAL CANCER AWARENESS MONTH!

MEMBERSHIP DRIVE & LECTURE SERIES

Annually, MPDPA Organises a 'Membership Drive' with an aim to promote the Association, to encourage new membership alongside encouraging Private Practitioners to attend our Lecture Series Seminars to collect CPD Points.

***In 2019, we extended our Membership Drive to include our fellow " Johorian" Colleagues*!**

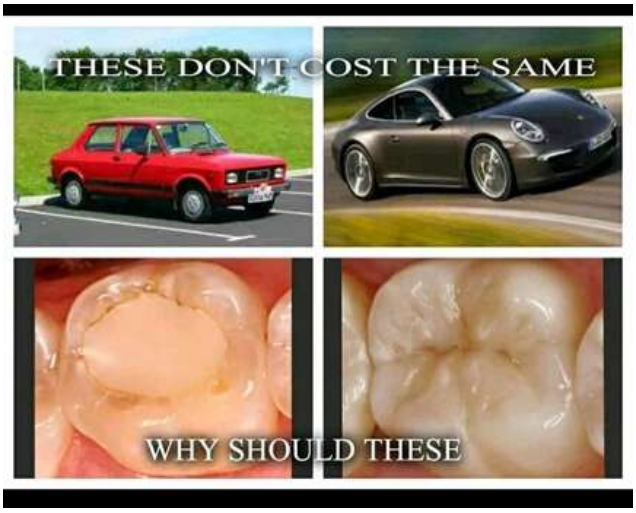
HANDS-ON WORKSHOP

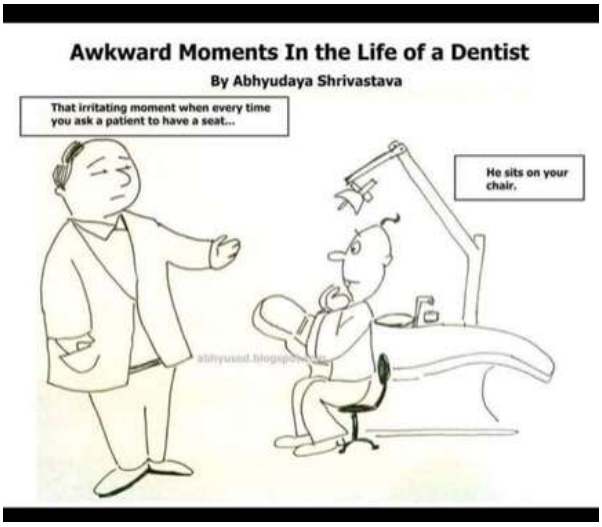
A recent collaboration with GC Asia, Headed by Mr.Ram & his Co- Assistant Mr.Palani.
A One Day Hands-On Workshop on " Immediate Solution For Missing Tooth" was organised.
We had participants from from both Ministry Of Health & our Private Practitioners participating.
It was a great success!

October 2019, a meeting was set to meet The Honourable Health Minister, Dato Seri Dr.Dzulkefly Ahmad to review the Dental Regulations.

SMILE ! !

While you still have teeth!





Contributed By; Dr.Vikas

COMPARISON OF INFLAMMATORY RESPONSE BY CO2 LASER AND SCALPEL AFTER ORAL SOFT TISSUE SURGERY

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INTRODUCTION:

In recent years, CO2 laser has become an alternative mode of treatment for the excision of various soft tissue lesions in oral cavity. In oral surgery, a number of clinical advantages are reported by CO2 laser as compared to conventional surgery by scalpel.

Large areas in oral cavity can be excised or vaporized with CO2 laser. It has coagulation and welding effect on blood vessels up to 0.5 mm caliber which produces bloodless surgical field with good visualization.These properties lead to better cosmetic and functional results especially when delicate dissection of highly vascular areas such as tongue is involved. There is minimal hazard of malignant cell seeding even in deep seated oral cavity tumors due to sealing of lymphatics and blood vessels. These clinical advantages of CO2 laser surgery leads to less post-operative complications and rapid recovery.

Many studies comparing different wattages of CO2 laser with those of scalpel on healing, has shown conflicting data. A number of studies have reported that wound produced by CO2 laser manifest more prominent initial inflammatory reaction than those produced by scalpel while other studies reported delayed and less inflammatory reaction.

Keeping in mind the existing controversies about laser the present study was planned. The aim was to compare and see the advantages and disadvantages of using CO2 laser and scalpel in wound healing 24 hours after surgery.

SUBJECTS AND METHODS:

This study was conducted at Animal Laboratory of Postgraduate Medical Institute, Lahore. Thirty Albino Sprague – dawley rats of about nine weeks age, weighing 250 to 350 grams, were included in the study.Animals were divided into 3 equal groups (A, B, C) of 10. In Group A Partial glossectomy was performed with 3 watts CO2 laser, Group B with 6 watts CO2 laser and Group C with the scalpel. Animals were kept at room temperature (22 + 2 C0), under natural conditions of humidity and light.The rats were allowed one week of acclimatization to the laboratory conditions before used in experiment. Partial glossectomy was planned for each group with a specially designed forceps of non reflected surface having two blades. Each blade was 10 mm X 5 mm at right angle. Standardized surgical conditions were maintained before undergoing surgical procedure. General anesthesia was induced with pentobarbital 4 mg per Kg body weight intra-peritoneally. Two rubber elastic bands were used to open the jaws by placing them in the upper and lower incisors. The steel nails were placed on the surgery board to hold the bands. Extra oral skin was prepared with pyodine scrub and oral cavity was washed with sterile water. Saliva was sucked prior to surgery and tongue was retracted by placing 3/0 silk suture on animal's left half of tongue.

The tongue was kept gently stretched during surgery for accurate cutting. Right half of the tongue was held dorso-ventrally by standard forceps such that 10 mm length was parallel to mid line of tongue while 5 mm side was perpendicular to mid line towards lateral margin (Fig. 2).

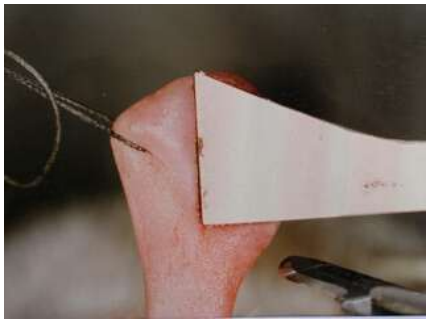

Fig.2

After application of standard forceps, partial glossectomy of group C was performed by scalpel blade No. 15. Right half of the tongue was excised all along the margin of standard forceps blades. The direction of excision was antero-posteriorly first, along 10 mm length and then from lateral margin to the mid line
No pressure or gauze was applied to stop bleeding. The wound was left exposed in the mouth and no sutures were inserted in order to produce standard test situation.
Generally 3 watt is considered as minimal and 6 watt as maximum output power of waveguide laser for oral clinical application in practice. Group A and B were performed with 3 Watts and 6 Watts CO2 laser respectively. LASERSAT – CO2 Waveguide Laser by Satelec (France) was used which generates a wavelength of 10.6 um in infrared spectrum. The LASERSAT CO2 laser had specifications of focal length 38 mm with beam diameter of 300 um. The laser rays reached the tissue surface in a range of angles nearer to 90 degree; to spare the surrounding tissue. Right half of the tongue was excised along the standard forceps and left without suturing as described for scalpel. Continuous suction was done to prevent inhalation of saliva and the smoke produced during laser surgery.

DISCUSSION :
Since the development of the CO2 laser as a surgical knife in 1970, many studies have been conducted to compare wound healing at different watts of CO2 laser with the scalpel, but these studies have certain deficiencies like these studies were conducted on very limited animal models, gross morphological observations of the wound were not being taken. Wound measurements for the assessment of the wound expansion, contraction during healing were not emphasized earlier.6 Many histological observations like cellular response, surface coverings, blood, carbonization, granulation and thickness of the healing epithelium etc, were not emphasized. The limited spectrum of research and controversies in the previous studies let us to perform this study. The 3 watts CO2 laser as minimum power and 6 watts CO2 laser as maximum power (a routine clinical practice) have never been compared with scalpel to see the soft tissue response. The weight of each animal was reduced 24 hours after surgery. This reduction in group A and B was not significant. In scalpel group the weight was significantly ($P < 0.05$) reduced. This reduction in weight in scalpel group was due to less intake, more postoperative pain and excessive bleeding duration as compared to laser groups where sealing of nerve ending and vessels up to 0.5mm, added comfort to the animals. The colour distribution in the scalpel wound was more towards yellowish reddish to reddish as compared to laser groups whereas it was yellowish mainly in group A. The yellowish hue was due to more denatured collagen on the surface of the lasered area and less neovascularisation. The wound shape was elevated (convex) in three groups and surface was irregular due to edema.In group B 50 % animal showed smooth surface that may be due to less inflammatory response. The wound edges in laser groups had reddish white colour distribution, and inverted shape due to denatured proteins while scalpel had flat and red colour wound edges. The increase in the size of the wound after 24 hours was due to the hydration which expands intercellular space, promoting inflammatory cell movement, protein extravasation and release of muscle spasm. Less expansion in group B was noticed as compared to group A and C. This reduced expansion was due to covering of wound surface with fibrinous coagulated coagulum which prevent the wound from external environments and less thermal conductivity during surgery.

Walsh et al described the first phase of healing in laser as the loss of carbonized material from the wound surface. Histologically surface carbonization in group A was more as compared to group B and difference was highly significant (P < 0.01). The carbonization was more in middle, and dorsal surface of the wound (due to more energy impact) as compared to ventral surface in both laser groups. The difference was highly significant (P < 0.01) in group A and was significant in group B. This shows the slow healing response in group A due to longer thermal effect, which causes retardation of phagocytic activity of leukocytes. The scalpel wound surface was covered with fibrino purulent membrane having a fibrin layer underneath and inflammatory reaction extending to lingual muscles.

Mean + SD (um) length of healing epithelium was measured . No sign of epithelial regeneration was noticed in group A and same was noticed by Kardos et al26 by using 4 watts CO2 laser. Re-epithelization was seen to be on its way more on dorsal and less on ventral surface in group B and C, the difference was significant (P < 0.02) in group C but was more significant (P < 0.01) in group B, the percentage of epithelization was raised in group C as compared to group B. Fisher and Frame31 used 10 to 20 watts power in oral cavity and found the same result, however, Luomanen and Veritan used average 6 watts power of CO2 on tongue and found early migration of epithelium in scalpel group and same was observed in our study but Pogrel et al reported faster re-epithelization in skin incisions by laser due to more hyaluronidase activity. Kardos et al mentioned the start of epithelization in 3 watts CO2 laser after 24 hours but his treatment was limited to epithelial surface which do not require more time for ablation. Hell and Lawrence analyzed that DNA synthesis occurs within one day in cut wound while in burn wounds it was delayed. This reflects that 6 watts laser has least thermal damage (due to less cutting time) and it appeared nearer to scalpel.

Mean + SD (um) surface granulation was more in group C as compared to group B and A and the difference was highly significant (P < 0.001). This can be supported by the presence of endothelial proliferation at the edges of scalpel wound as reported by Margic and Morosolli et al This showed the active wound healing in scalpel as compared to laser groups. In group A less granulation was due to heat effect that retards the capillary proliferation and fibroblast activity.Mean + SD (0.0625 um2) cellular count of group C was more as compared to group A and B except neutrophils The difference was not statistically significant amongst groups. Neutrophils are primary inflammatory cells and appear in excisional wounds after 24 hours.35,37 Group A had more neutrophils count as compared to group B and C. More inflammation was noted by Madden et al7, Pogrel et al27 in scalpel group but this pattern was not noted by Luomanen et al, Johnson et al37. Raise in cutting duration of laser increases the inflammatory response. The rat tissues contains higher percentage of fibroblasts than other cells.39 Beginning of fibroblasts reaction in wound after one day was observed by Mondain et al. Fibroblast count was less but dominated in group C than group A and B and the difference was highly significant (P < 0.001). Group B had more fibroblasts count than group A and was statistically significant (P < 0.01). Mast cell count was more in group C but degranulated mast cells were seen in laser groups that were also observed by Basu et al and Pinhero et al. The under granulated mast cells were found more in group B than group A but the difference was not statistically significant.

CONCLUSION:

6 Watts CO2 laser wound initial healing response was much better as compared to scalpel in terms of bleeding duration, surgery duration, wound appearance surface coverings and inflammatory cells response. The 3 Watts CO2 laser wound in spite of less Wattage had not good healing response due to deeper diffusion of heat by more cutting duration.

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Professional Indemnity Insurance For Dental Practitioners

Dear Doctor,

We are very pleased to inform you that Zurich General Insurance Malaysia Berhad in collaboration with Medical Risk & Claims Management Services, are proudly launching the pioneer locally underwritten Dental Practitioners Professional Indemnity Scheme (MRCM).

We are the first to offer the Professional Indemnity Insurance Scheme for the dental practitioners in Malaysia, together with MRCM Services we have developed a specially designed scheme to meet the needs of the dental practitioners in Malaysia.

This scheme is comprehensive and has taken account of the current trends and responsibilities of the dental practitioner and also the latest legal developments (Private Healthcare Facilities & Services Act).

We have also thought of the retiring practitioners for whom we are offering continued cover. This means as a retired practitioner, you need not worry about impending issues which may arise out of work done prior to your retirement. Hence, you can have peace of mind even after your retirement.

We have also introduced cover for Malaysian Dental Council disciplinary hearings, not usually provided by commercial Insurers.

Being an exclusive scheme for dental practitioners, the inevitable need for locums is recognized and it is incorporated as a special feature at request. Also amongst the highlights of the scheme is the indemnity cover for Government Dentists practicing as locums in private practices.

Apart from the enhanced coverage, we trust that you will be comfortable with the scheme as it is underwritten by Zurich General Insurance Malaysia Berhad, one of the world's leading insurance groups.

The scheme is managed by Medical Risk & Claims Management Services, a specialty services company offering medical risk management services. MRCM Services has been actively involved in the development and further enhancement of the pioneer locally underwritten Professional Indemnity Scheme for General Medical Practitioners which was first introduced in 1994. As scheme managers, MRCM Services has managed to maintain the premiums at affordable rates without any abrupt increases since its introduction.

MRCM Services has a highly qualified consultant on board to provide valuable advice and expertise. Dr. KM Ponnusamy MBBS (Belgaum) LLB (Hons) (London) CLP (Mal) has two decades of experience in medical risk management and is currently practicing as a medico-legal consultant. He has investigated and reviewed over 1,000 medico-legal claims as a specialty adjuster for insurance companies. He has represented the medical profession in the Preliminary Investigation Committee (PIC) hearings at the Malaysian Medical and Dental Council apart having been a member of the Medicine Advertising Board, the Poisons Board, Drug Control Authority and a host of others associated with medical risk management. He continues to be a member of the National Patient Safety Council at Ministry of Health and Member of the Ethics Committee of Malaysia Medical Association and Pharma Ethics Committee.

The Professional Indemnity Insurance, which when we began in 1994, was only for the General Medical Practitioners being the FIRST ever in the country. Having successfully managed the scheme for a decade, we decided to extend the scheme to General Dental Practitioners and the Pharmacists in 2004. Again they were the FIRST in the country for these Professionals.

After more than a decade, we are EXTENDING the scheme to all DENTAL Professionals, Generalist, as well as Specialists AND also to a range of Medical Specialists apart from the General Practitioners whom we have been catering for since 1994. Our track record on Our Products, Services, and Claims Management speaks for itself.

We are confident that you will enjoy great benefits and peace of mind by participating in this superb scheme.

2. Locum Services		
i) General Practice	1,000,000	700
ii) General Practice with specialized procedures	2,000,000	1,250
Iii) Specialist Practice	2,000,000	1,700
3. Full Indemnity Cover (covers your practice both in public and private sectors, doing general dentistry)	1,000,000 2,000,000	950 1,250
Private Dental Practitioners		
1. General Dental Practice	1,000,000 2,000,000	1,200 1,400
2. General Dental Practitioners, practising accredited specialised procedures.	2,500,000	1,700
3. Dental Specialists (Private sector) (except Maxillo-Facial surgery which can be considered upon request)	2,000,000 3,000,000	2,200 2,700

* The Premium is subject to tax or other government levies and Stamp Duty RM10.
Your obligation to pay Service Tax shall form part of the term and conditions in your insurance policy.

Important Notice:
The Medical (Amendment) Act 2012 makes it legally compulsory for all doctors to produce evidence of professional indemnity cover* when applying for their annual practising certificate. This said Act is effective 2019.

Features

- First locally underwritten Medical Indemnity Scheme, initiated by doctors in 1994 and extended to dentist and pharmacist in 2003.
- Can Provide Full Retroactive* Cover at no additional cost.
  Meaning you will be covered for services provided from the first day you begin your career as a Medical Practitioner. *For Retroactive cover, kindly furnish a copy of your previous policy schedule for underwriting purpose.
- Estates and Legal Representatives of members are also covered.
- Provides advice & assistance with representation when necessary at Malaysian Medical and Dental Council disciplinary hearings.
- Provides cover for Good Samaritan Acts.
- Provides locum extension cover.
- Provides Medico - Legal assistance and support.
- Provides Indemnity Cover to Freelance and Government Doctors for Locums.

To sign up, kindly contact :

ZURICH

Mr.Suresh : 013 391 2086

Dr.Mahendran : 012 203 8343
or drop us an email at : mpdpa1@gmail.com

Dentistry Is Not Expensive, NEGLECT IS !

Aesthetic Rehabilitation Of Extensively Damaged Teeth In The Maxillary Anterior Region.

Lim Ko Wei, Assoc. Prof. Ravikanth H. Jujare, Dr. Lim Zhi Yin Joan, Faculty of Dentistry, MAHSA University.

Winner of Malaysia's Next Top Dentist 2019 in collaboration with Malaysian Association for Prosthodontists (MAP)

Introduction

The restoration of teeth with extensive structural damage is a challenging clinical procedure in prosthetic rehabilitation. Loss of tooth structure may be a result of caries, previously failed restorations, fractures or even procedures related to endodontic treatment. When restoration of such teeth is indicated, the main objective of the clinician must be to conserve and protect the remaining tooth structure. In addition, the approach should always be based on consistent scientific evidence to minimize error and improve the prognosis. Despite the availability of variety of materials, techniques and reports in scientific literature, the criteria for selection of such teeth for restoration must be carefully analysed. The remaining tooth structure, endodontic considerations and occlusal factors are the key features to formulate a correct treatment plan.

Case Report :

A 42-year-old male patient visited the clinic with the complaint of broken front teeth due to biting hard food which fractured in increments over a period of six months. History revealed that root canal therapy and a tooth-colored restoration was placed on right central incisor 2 years ago and one-half of the right lateral incisor was lost due to caries creating a large space which affected overall aesthetics and function in the anterior region. On examination, extensive structural damage of Tooth-11 was seen with approximately 3mm of coronal structure remaining above the gingival margin. The fractured margin was affected by caries and soft gutta-percha was noted on exploration of the exposed canal. Tooth-12 presented with a large carious lesion on mesial-half involving the incisal edge. An under contoured and discolored restoration was observed on Tooth-21. In addition, clusters of minute white spot lesions were seen on the cervical thirds of all maxillary anterior teeth. The gingival tissue around the affected teeth presented no signs of inflammation and bleeding. (FIG.1,2)

Intra-oral periapical (IOPA) radiograph showed no periapical changes but revealed large canal with parallel walls of Tooth-11 and pulpal involvement of Tooth-12. (FIG.3)

FIG.1

FIG.2

Sequential Treatment Plan

Endodontic treatment: As a pre-requisite in restoring severely damaged teeth, endodontic consultation and necessary treatment of the involved teeth were done. The exposed gutta-percha was removed, and the apical-third of the canal was re-obturated with Biofilling material (BioMTA) in order; to reinforce large parallel walled canal of the central incisor and, to promote dentin regeneration. The lateral incisor was treated endodontically with a conventional technique and restored with a tooth-colored restoration. (FIG.4)

FIG.3

Post-and-core restoration: The extent of remaining tooth structure and the radiographic root length of Tooth-11 was assessed and measured for ferrule effect and selection of post.Few mandatory procedures were performed like; removal caries, elimination of plaque and measurement the remaining tooth structure. The effect of Ferrule was determined by vertical (remaining tooth structure) and horizontal (dentin thickness) measurements at four points; labial, lingual, mesial and distal. A 3600 collar 2 mm of tooth structure was present and included to maximize the ferrule effect. The post length which is an important factor in predicting the retention of the future, was determined on the radiograph to be at least equivalent to the height of the hypothetical crown. (FIG.5). Recommended post space was created with minimum preparation. A suitable glass fibre post (Dentsply Sirona Post and core system) was cemented and core build-up done (FIG.6,7)

FIG.4

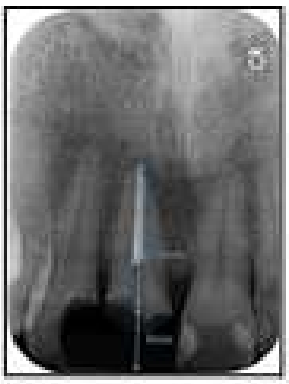

FIG.5

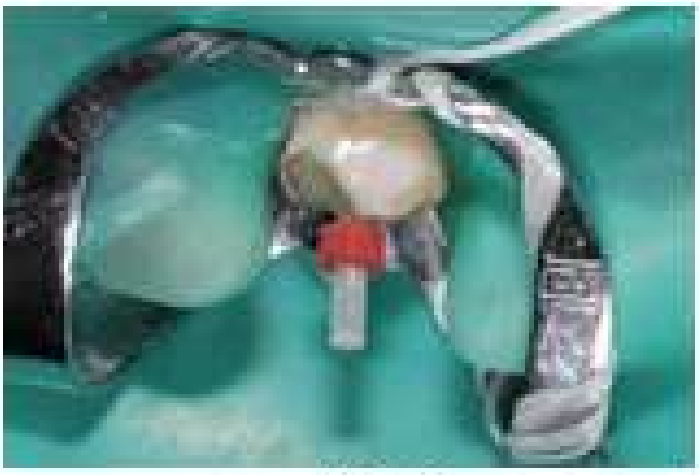

FIG.6

FIG.7


FIG.7


FIG.8


FIG.9


FIG.10

Diagnostic wax-up: Primary impressions were made and mounted using bite registration. A diagnostic wax-up was done and evaluated. (FIG.8) An external surface form (ESF) index of the wax-up recorded in 3M ESPE ExpressTM XT Putty Soft VPS impression material to fabricate interim restoration.(FIG.9)
Shade selection: Shade A2 was selected. (FIG.10)

Tooth preparation and Interim restoration: Full coverage restoration was indicated on maxillary right central and lateral incisors to restore aesthetics. Recommended tooth preparation of involved teeth was done to receive all-ceramic restorations (FIG.11,12). The preparations were evaluated and refined for optimum tooth reduction and precise finish lines. An interim restoration was fabricated in 3M ESPE ProtempTM 4 Temporization material using the ESF index.
Gingival retraction and Impressions: The goal of gingival retraction is to atraumatically displace the gingival tissue to allow the flow of impression material in order to record the finish line. Gingival retraction was achieved by a cordless technique using 3M ESPE Astringent Retraction Paste (FIG.13).
Final impressions were made by single-stage technique with 3M ESPE ExpressTM 2 VPS Heavy body and Light body impression material. (FIG.14). The patient was fitted with previously prepared interim restoration were cemented with 3M ESPE RelyXTM Temp NE temporary cement.(FIG.15)

Final restoration: A lab work authorization form with relevant details like restorative material, margin design, shade and characterization were filled out and sent to lab. As per lab prescription, two separate Lithium disilicate glass-ceramic based IPS e.max
restorations were fabricated. The individual restorations were tried in the patient to verify margin fit, shade match, surface texture, characterization and overall finish before cementing.Cementation: After cleaning the inner surface of the restorations, they were then filled with 3M ESPE Rely XTM U200 Self Adhesive Resin
Cement and seated on the preparation. The excess cement was removed, and a floss was used to clean the interproximal areas. (FIG.16,17,18)

FIG.11

FIG.12

FIG.13

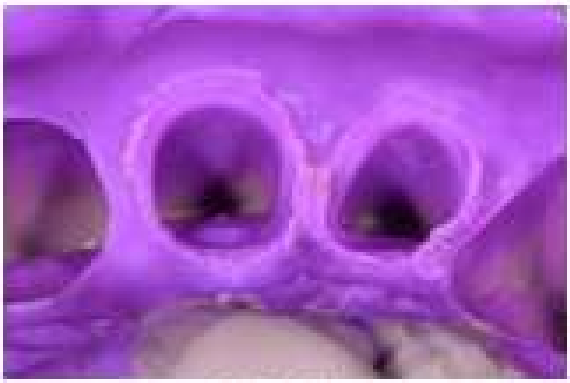

FIG.14

FIG.15

FIG.16

FIG.17

FIG.18

Discussion and Conclusion

This case report highlights the rehabilitation of a severely damaged maxillary central incisor tooth with a large parallel walled root canal. Scientific evidence indicates that the dimensions of the crown and dentin are important. This minimum thickness is more often achieved in buccal or palatal/lingual than interproximal areas after endodontic treatment and tooth preparation.2-4 The ferrule effect, need for a 360º collar 2 mm in height (1.5 mm minimum) was first described by Sorensen and Engelman in 1990.

A post should be used when insufficient tooth substance is not available to support core material or the final restorations.6 The post length should always be the same or greater than that of the prospective crown height and increasing post diameter to increase retention is strictly not recommended as this creates unnecessary weak dentinal walls. The main barrier against reinfection of the periapical region is the endodontic obturation material. Evidence suggest leaving 3–5 mm of undisturbed apical endodontic obturation material after post preparation. Occlusal load is also an important consideration in estimating the chances of successful restoration of a damaged tooth. A retrospective study by Sorensen and Martinoff found that the success rate for single-unit crowns was 94.8%. For esthetic restoration in this case, Lithium disilicate is among the best known and most widely used types of glass ceramics. They are not only strong but is very versatile and lifelike. Lithium disilicate comes in many translucencies and can be layered to maximize aesthetics.

Conclusion

In restoring a severely damaged tooth, the extent of remaining tooth is the most critical factor in determining the prognosis.

The clinician must carefully assess the probability of restoring severely damaged teeth successfully. A self-developed clinical record form may be used to evaluate damaged teeth using these criteria in following sequence: ferrule effect, relation between root and crown length, endodontic condition, can be helpful in diagnosis and to establish the correct treatment plan.

Acknowledgement

I would like to express my deep gratitude to MAHSA University and my supervisors, Assoc. Prof Dr Ravikanth H. Jujare and Dr Lim Zhi Yin Joan for giving me this opportunity and their patience guidance and enthusiastic encouragement. Thanks to 3M Malaysia for sponsoring this event and supplying the material needed. My grateful thanks are also extended to the technicians of Jenny Ceramic Laboratory for her artistic work. I am grateful and special thanks to everyone who have helped me most throughout this case. Finally, I wish to thank my parents for their support and encouragement.

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The Achievements of an organization are the results of the combined effort of each individual.

5th MPDPA ASEAN DSA CONGRESS & TRADE EXHIBITION 2019

Organizing Chairperson : Dr.Foo Gaik See

Our 5th MPDPA ASEAN DSA Congress & Trade Exhibition was a great success!
A total of 89 DSAs took part in this event,representing both the Private & Government Sector Clinics, including a Dentist who came from Brunei!
We had a good team of Speakers, presenting lectures on both dental and non dental related topics.
A small trade exhibition was organised. We had great support from our traders; Pureen, Colgate, GSK, GC and MaryKay to further grace this event!
Participants went home with a lucky draw each and door gifts as sponsored by our traders.
KUDOS! to everyone who made this event a great success!!

Participants performing Simple Exercise Steps as taught by our Guest Speaker, Physiotherapist Ms Yogadevi.

Our Invited Guest Speakers

Dr. Kalaiarasu Peariasamy (Head of Department & Senior Consultant in Paediatric Dentistry & Head of CRC Hospital Sungai Buloh)

Puan Haslinda from MaryKay

Dr.Kathiravan Purmal (Consultant Oral & Maxillofacial Surgeon & Orthodontist)

Physiotherapist, Ms.Yogadevi

With our Fellow Supportive Traders.

WORLD DENTAL CONFERENCE & TRADE EXHIBITION 2019

WDC 2019 : A joint effort between MPDPA & The World Dentists Association (headed by Dr.A.V.Arun) whom organised a two day International Dental Conference at PWTC, Kuala Lumpur on the 28th-29th September 2019.
The Honourable Health Minister, Dr.Dzulkefly Ahmad was invited to grace & officiate this prestigious event alongside other MoH VIPS , YB.Dr.Doreyat Bin Jemun (Principal Director of Oral Health Div) & Dr.Mustaffa Jaapar (Senior Assistant Principal Director & Oral Health Programme , Oral Division MoH). A total of 200 delegates participated.

Representing MPDPA as Keynote Speakers were Dr.Wong Foot Meow (Consultant Oral & Maxillofacial Surgeon) Dr.Kalaiarasu Peariasamy (Head of Department & Senior Consultant in Paediatric Dentistry & Head of CRC Hospital Sungai Buloh) Dr.Firdaus Hanapiah (Consultant Oral & Maxillofacial Surgeon) Dr.Puvanendran Balasingham (Consultant Orthodontist) and Associate Professor Dr. Mas Suryalis Ahmad (Associate Professor and Clinical Specialist in Special Care Dentistry.

Welcoming the VIP Entourage

At the Press Conference

Opening Ceremony of WDC 2019

OPENING CEREMONY : WORLD DENTAL CONFERENCE & TRADE EXHIBITION 2019

Recognising The Honourable Guest Of Honour with a 'golden shawl'

A Gala Dinner was organised following the Opening Ceremony. Two of our fellow Honorary MPDPA Past Presidents; Dr.K. Pathmanathan and Dr.Arasu Rajaratnam were recognised with a "Lifetime Achievement Award". To honour their efforts and contributions towards MPDPA & the field of dentistry. This award was presented to them by The Honourable Health Minister, Dato Seri Dr.Dzulkefly Ahmad.

MPDPA Founding & Honorary member Dr.K.Pathmanathan receiving his award.

Dr.Arasu Rajaratnam being recognised with A Lifetime Achievement Award.

Our Keynote Speakers were also recognised individually for their efforts and contribution towards their respective fields in dentistry.

Past President, Dr.Wong Foot Meow (Consultant Oral and Maxillofacial Surgeon) being recognised for his contribution in the field of Oral and Maxillofacial Surgery.

Dr.Kalaiarasu Peariasamy (Head of Department & Senior Consultant in Paediatric Dentistry & Head of CRC Hospital Sungai Buloh) being recognised for his contribution in the field of Peadiatric Dentistry.

Dr.Mas Suryalis Ahmad (Associate Professor and Clinical Specialist in Special Care Dentistry) being recognised for her contribution in the field of Special Care Dentistry.

....And the Night Continued


EXCELL CE IN
DENTIST WARDS
2019

A Token of Appreciation were presented To Our VIP Guests.
Artwork Painted by Our Commitee Member, Dr.Rubini Arasu.

51st AGM

One of the many agendas that were discussed :

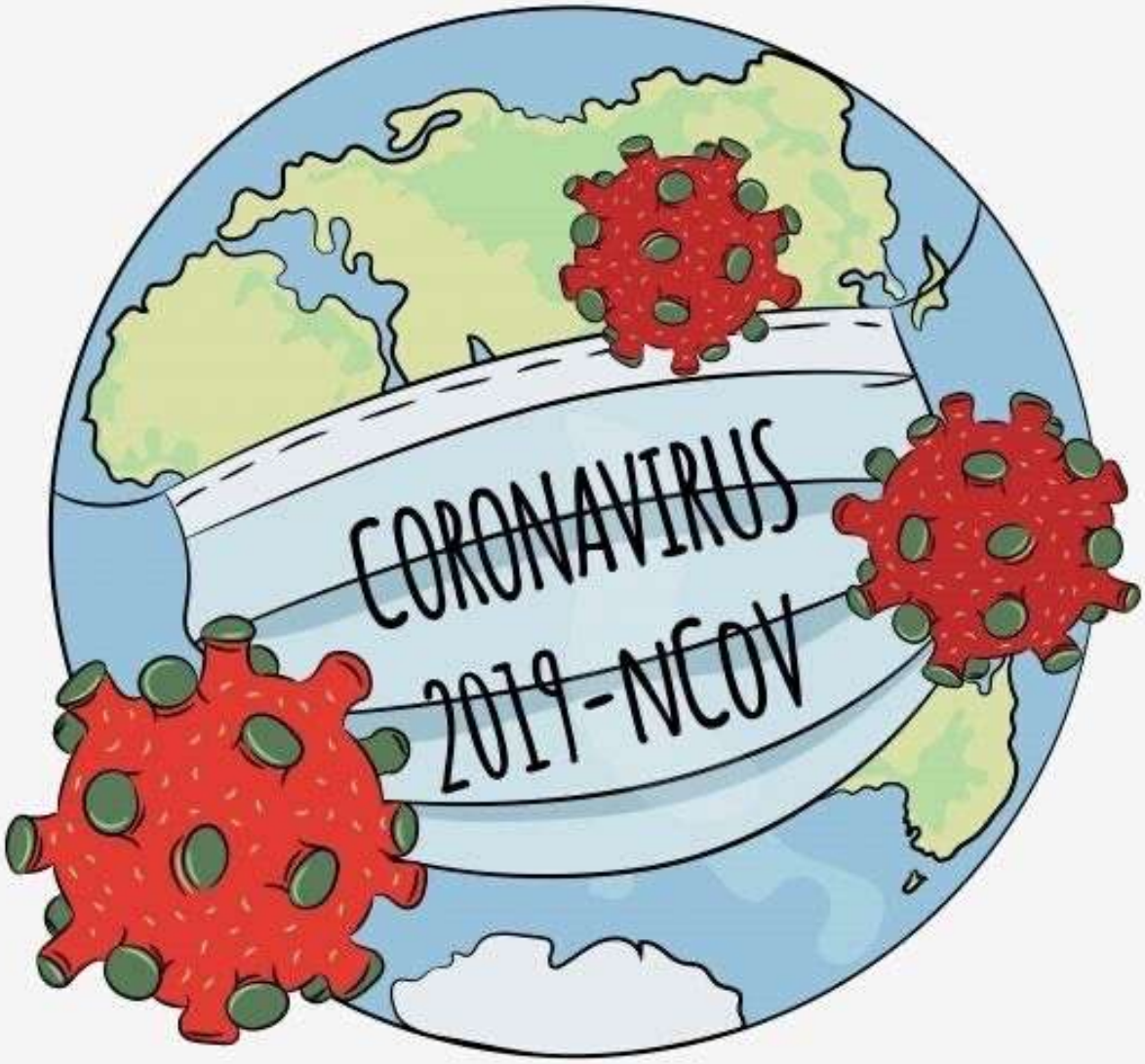
To deliberate & vote on :

a) For any member wishing to take the post of President has to have 3 terms in the council (not necesssarily consecutively).

b) Any member can join as a NEW MEMBER of MPDPA without being a member of MDA.

PAST & PRESENT MPDPA PRESIDENTS.

Our Contributions towards the current CoVid 19 Pandemic!



CoVid 19 : CSR PROJECT 2020

In view of the current Corona Virus (CoVid 19) outbreak, MPDPA , initiated a CSR (Corporate Social Responsibility) project to provide Personal Protective Equipments (PPEs) to our frontliners. Our supplies were donated to Sg.Buloh Hospital, Kuala Lumpur Hospital (HKL) & *Klinik Kesihatan* Cheras Baru.

Special Thanks to Our Members ; Dr.Rani Panadam, Dr.Mah Bak Hoon, Dr. R. Jayaseel's Family Members & Dr.Puvan who contributed towards this great Cause as well!

Supplies donated to Sg.Buloh Hospital & Kuala Lumpur Hospital (HKL) : 28th March 2020.

DELIVERING PPE INTUBATOR BOXES

to HKL & Sg.Buloh Hospital - *30th March 2020.*

ROYALE™ RX PHARMA

SUPPLYING OF FACE MASKS

A Collaborative effort with *RoyalePharma (Pharmaniaga)* to provide Emergency Supply Of Face Masks to our Dental Practitioners.

Due to the nationwide rationing of face masks, we are prioritizing our supply to our Members In Benefit first!

If you are a Member in Benefit & would like to replenish your Face Masks Stock, please drop us an email : mpdpa1@gmail.com or contact Dr. Jayaseel Ramachandran 012 670 0864.

KNOW YOUR FACEMASKS

- ALWAYS CHECK FOR THE BFE WHEN SELECTING FACE MASKS
- CHOOSE MASKS WITH BFE > 95% FOR ADEQUATE PROTECTION AGAINST BACTERIA & VIRUSES
- ENSURE FACE MASKS ARE REGISTERED WITH THE MEDICAL DEVICES AUTHORITY (MDA) BEFORE USING!

WHAT ARE BFE & PFE?

BFE BACTERIAL FILTRATION EFFICIENCY	Percentage of aerosol particles filtered out at a pore size of 3 microns
PFE SUBMICRON PARTICLE FILTRATION EFFICIENCY	Percentage of submicron particles filtered out at a pore size of 0.1 microns

** Size of coronavirus particles is approximately 0.125 microns! **

COMMON FACEMASK CLASSIFICATIONS

KOREA-IMPORTED

KF80	Filters fine dust and airborne particles sized 0.6μ, blocks out 80% of particulate matter
KF94	Filters particles of sizes 0.4μ and below, blocks out 95% of particulate matter
KF99	Filters particles of sizes 0.4μ and below, blocks out 99% of particulate matter

TAIWAN-IMPORTED

CNS 14755	Dust mask *(NOT effective in filtering bacteria/viruses)*
CNS 14756	Activated charcoal face mask *(NOT effective in filtering bacteria/viruses)*
CNS 14774	Medical mask, filters small aerosol and bacterial/viral particles, and large droplets
CNS 14775	Medical mask, protection against bacterial/viral particles
CNS 14776	Medical mask, shields from penetration by blood splatters
CNS 14777	Medical mask

USA-IMPORTED

American Society of Testing and Materials (ASTM) standards

**All face masks has to undergo BFE & PFE testing to qualify for use as medical masks*

Level 1 / Type 1	≥ 95% BFE, ≥ 95% PFE @ 0.1μ
Level 2 / Type 2	≥ 98% BFE, ≥ 98% PFE @ 0.1μ
Level 3 / Type 3	≥ 98% BFE, ≥ 98% PFE @ 0.1μ

CHINA-IMPORTED

YY/T0969	Single use surgical mask, filters 95% of 2μ-sized particles, no special requirements for filtration of 0.3μ non-oil particulates
YY/T0966	Single use medical mask, no standardised PFE
YY0469	PFE >30%

BE TRUE
TO YOUR
TEETH
OR THEY'LL BE
FALSE
TO YOU.