



ORAL HEALTH GUIDE

VOLUME 7 | 2020-21

PAN-DENT-EMIC

Dental Care Amidst The Pandemic



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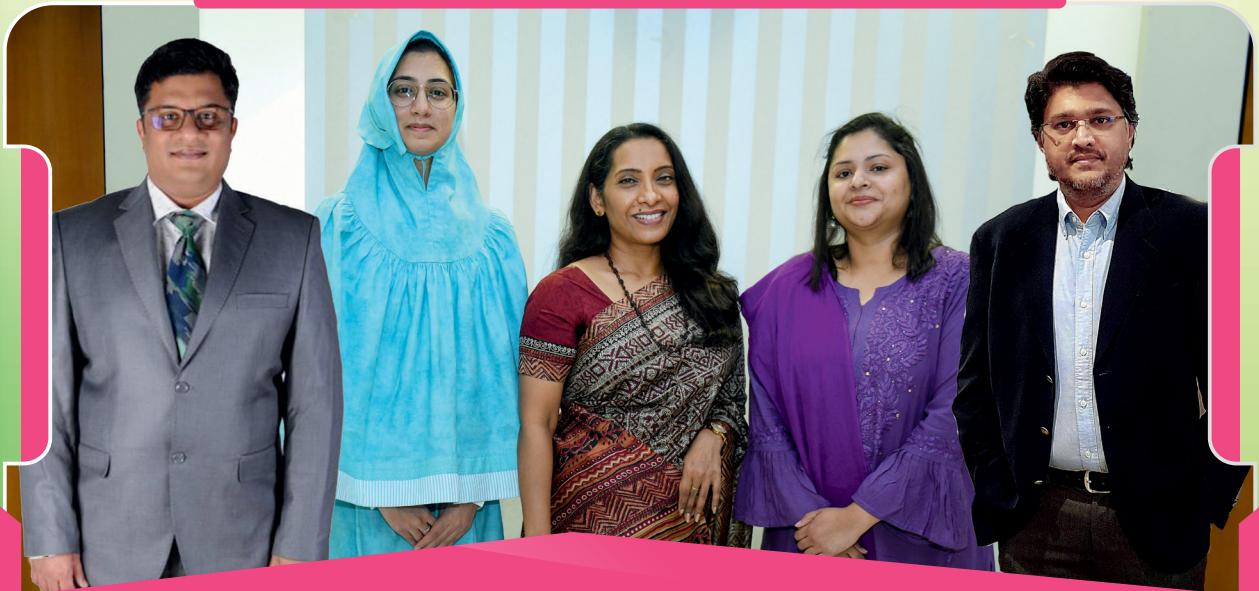
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Ambassador Message



AMBASSADOR OF INDIA
KUWAIT

Message

I am happy to learn that the Indian Dentists' Alliance in Kuwait (IDAK), an alliance of Dental Surgeons of Indian origin working and residing in Kuwait, is bringing out the 7th Edition of their Oral Health Guide titled "PAN-DENT-EMIC (Dentistry amidst the Pandemic)", electronically this year.

2. I am also glad to note that IDAK has been educating members of the Indian community in Kuwait about dental health and oral hygiene, by conducting Dental Camps, Symposiums, Study Clubs, etc., and by publishing Oral Health Guides and Patient Handbooks.

3. While placing on record my wholehearted appreciation for the impressive work being done by IDAK, especially in these times of the Pandemic, I take this opportunity to extend my best wishes to the office bearers and all the members of the IDAK in all their future endeavours.

Congratulations!

Kuwait

December 20, 2021

(Sibi George)



Assistant Undersecretary Message

State Of Kuwait
Ministry Of Health
Assistant Undersecretary Office
For Dental Affairs



دولة الكويت
وزارة الصحة
مكتب الوكيل المساعد لشؤون طب الأسنان



Message



To

**The president
Indian Dentists' Alliance in Kuwait (IDAK)**

On the occasion of the virtual issuance of the Oral Health Guide in December 2021, I am pleased to appreciate your efforts and the efforts of all Indian dentists in Kuwait, whom we consider to be our partners in providing dental services and oral health awareness services in our beloved country, Kuwait, we wish IDAK further success.

Best Regards,

Dr. Meshal Ali Ahmed

Assistant Undersecretary
For dental Affairs
Ministry of Health
State of Kuwait





Director of Dental Administration

State Of Kuwait
Ministry Of Health
Dental Administration



دولة الكويت
وزارة الصحة
إدارة طب الأسنان

14th December 2021

The Chairman,
Indian Dentists' Alliance in Kuwait.

I'm very glad to note that Indian Dentists' Alliance in Kuwait (IDAK) is coming up with the new edition of their oral Health guide titled "**Pan-Dentemic**".

I'm impressed to know that this edition will have exclusive articles on different aspects of COVID-19 relevant to a dentist.

I would like to wish all the members of IDAK the very best in all their future endeavors.

Best Regards,

Dr. Sabiha Al Mutawa
Director, Dental Administration
Ministry of Health
State of Kuwait

Dr. Sabiha Al-Mutawa
Director of Dental Administration
Ministry of Health, Kuwait





Message from Dean (KU)



The President and Members,
Indian Dentists' Alliance in Kuwait

It gives me immense pleasure to know that Indian Dentists' Alliance in Kuwait (IDAK) will be releasing the latest Oral Health Guide – Pan-Dent-Emic, discussing the various issues pertaining to COVID-19 and Dentistry. I understand that this year the Oral Health Guide will be made available on the Virtual platform. I am extremely happy to know the enormous efforts undertaken by IDAK as a group in response to the on-going pandemic COVID-19. I sincerely appreciate such noble initiatives by IDAK and take this opportunity to wish you all the very best.

Best Regards

Dr. Adel A. Al-Asfour
Dean
Faculty of Dentistry
Kuwait University

Dr. Adel Al-Asfour

Dean, Faculty of Dentistry

Kuwait University

Kuwait

06/12/2021





KDA President Message



Message from Kuwait Dental Association

Dear President and Members of IDAK,

I am happy to learn that Indian Dentists Alliance in Kuwait (IDAK) will be publishing the 7th edition of Oral Health Guide in December 2021 in virtual platform. Over the years IDAK Oral health guides, have discussed various issues related to dentistry and is a boon to the public. Hope the new guide will do the same.

On behalf of Kuwait Dental association, I wish the very best to my Indian colleagues and hope, through IDAK and it's activities, you all will continue the good work to uplift the dental profession in Kuwait.

Dr. Mohammad A. Dashti
Oral & Maxillo-facial surgery
BDS. MSc. PhD
President of Kuwait Dental Association


Dr. Mohammad A. Dashti
Oral & Maxillofacial Surgeon
BDS, MSc, Phd
President of KDA



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IDAK President's Message

This virtual oral health guide on "PAN-DENT-EMIC" was conceived as an aid to community and clinicians in understanding and treating patients during the ongoing COVID-19 pandemic. More clinicians are discovering that this period of pandemic is one of the most challenging and difficult areas of clinical practice, calling for updated knowledge about the impact of COVID -19 on oral health. On behalf of IDAK, I take this opportunity to thank all the authors who have contributed to this 7th volume of the OHG. I would take this opportunity to thank the Chief Editor Dr. Devi Priya & her team for their untiring & constant support during this difficult period.

On behalf of IDAK members I extend my greetings & heartfelt gratitude to His Excellency the Amir, His Excellency the Crown Prince, government & people of Kuwait for the trust & support to IDAK activities.

H .E. Mr. Sibi George, Honorable Ambassador of India to Kuwait & all the staff of the Indian Embassy have been providing a great deal of support and strength to IDAK for which we are extremely grateful.

We are thankful to all the benevolent officials of Ministry of Health for their continuous & unconditional support to IDAK.

Lastly my sincere thanks & congratulations to all the members of IDAK who have contributed significantly since its inception.

Dr. Rajesh Alexander
President-IDAK
2020-21.





IDAK General Secretary's Message

When we took office on January 1st 2020, we never expected the turn of events to be like this. But it gives me immense satisfaction that, with the generous contribution from the IDAK members, we were able to provide help to the needy and marginalized. Although we are not a charity organization, we provided provisions in different parts of Kuwait worth around 6000 KD.

It is commendable that dentists worldwide have risen to the challenge. We, the dentists at IDAK, have also provided services in various ways to reduce the strain on the health care sector. Right from contact tracing at the start of the pandemic to various charity services provided to the needy, IDAK's role has been largely appreciated.

Today, it gives me immense pride and pleasure to pen a message for "The IDAK Pan-Dent-Emic" Virtual Oral Health Guide released by the editorial team of IDAK. A series of articles and relevant resources pertaining to COVID-19 that would help you to hold your guard against the disease, as communities around the world respond to the rapidly evolving situation.

On behalf of IDAK, I would like to congratulate the editorial team led by Dr. B. Devi Priya for this stellar job. I also take this opportunity to appreciate all the executive members for their tireless work despite this uncertain situation. I thank all my fellow council members who have proved an asset and whose dedication has kept the association thriving under the clouds of the pandemic.

IDAK would like to place on record our appreciation and gratitude to H.E. Shri. Sibi George, Indian Ambassador to Kuwait and other Indian Embassy officials for their whole hearted support.

IDAK also expresses its gratefulness towards Dr. Buthaina Al Mudhaf, Asst. Undersecretary of Public Health. Our sincere thanks to Dr. Mohammad Alsuwaidan and Dr. Aishah AlSumait from the Public Health department, Ministry of Health. Dr. Meshal Al Kanderi, Asst. Undersecretary for Dental affairs; Dr. Sabiha Al Mutawa, Dental Administration Manager; Dr. Adel Al Asfour, Dean, Kuwait University; Dr. Mohammad A. Dashti, Chairman Kuwait Dental Association; Dr. Fawaz A. Al Rifaee, Chairman, Kuwait Institute of Medical Specialisation and to KDD and all the other sponsors.

Last, but not in the least, I wish to thank my wife, Mrs. Lekha Jacob, and our daughter Joanne. I could not have done this without your hugs and smiles.

Dr. Jacob Ambooken Lonappan
General Secretary, IDAK



EDITOR'S NOTE

The hustle and bustle of Planet Earth had reduced to a relatively slow grind after the advent of the coronavirus pandemic. The whole world navigated through uncharted waters in the last 2 years. As with any field, it can be argued that COVID-19 has completely altered the dental care landscape with new threats and challenges. During this time, delays in dental treatment have resulted in significant consequences for oral health. As the world is learning to live with COVID, dental health care providers want to assure that dental offices are safe places to provide care.

IDAK has mutated into several versions and has always strived to create a positive difference in the society despite testing times. In this “tele-everything” world, people’s relationship with technology continues to deepen and we have come to rely more on digital connections for work, education, health care, and social interactions. Keeping pace with rapidly changing times, IDAK presents our first-ever Virtual Oral Health Guide, “PAN-DENT-EMIC”. As the name suggests, the guide is tailored to offer you a glimpse into the world of dentistry during the pandemic.

First and foremost, I express heartfelt appreciation to all authors on behalf of the entire editorial board. It was the sheer co-operation, enthusiasm, and spirit of the authors that shaped this guide to a reality.

It would not be appropriate if I fail to mention the tireless efforts of my wonderful teammates, Dr.Lavanya, Dr. Lini, Dr. Neelima, Dr.Sreena, and Dr.Tiny, who were warriors, with nothing but pens as their weapons, to combat the challenges during the making of this guide. Special thanks to Dr.Rino Roy for his kind support and guidance as an advisor throughout.

The IDAK council 2020-2021 has been a real motivation in this whole endeavour, right from its conception through execution. On behalf of the entire editorial team, I would like to express my profound gratitude to them. It gives me immense pride to be a part of an organisation with a deep sense of responsibility towards the community.

Our sincere thanks to Mr. Panitus Anand for his invaluable patience and promptness in his work without whose technical assistance, this guide would have just remained a distant dream.

This Seventh Volume of the IDAK Oral Health Guide 2020-2021 is our humble attempt to package and present the scientific research findings from the laboratory desk to the desktop of the common man. The take-home message is, “Never allow the fear of COVID to let your dental care take a back seat.” Hope this e-guide provides useful information to the readers and you enjoy it as much as we did to compile it.

Happy Reading!
Devipriya





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THE NEW NORMAL – Dr. Shashikala Savla

ORAL MANIFESTATIONS OF COVID-19 INFECTION – Dr. Bobby Joseph

ORAL HYGIENE DURING COVID-19 – Dr. Tiny Elsa Thomas

'BLACK FUNGUS' -MAIMING COVID PATIENTS – Dr. Ranjitha RS

SPECIAL CONSIDERATIONS FOR SPECIAL NEEDS – Dr. Amrita Geevarghese

CO-MORBIDITIES IN COVID -19 – Dr. Rino Roy

ALL IN A DAY'S WORK – Dr. T. Natesh Kumar

THE NEW NORMAL

Dr. Shashikala Savla
General Dentist - City Clinic



The COVID-19 pandemic has caused a massive change to our daily lives, with changes that have happened rapidly and abruptly. With around 52.9% of the world population having received at least one dose of the vaccine, alterations in lifestyle are now occurring amidst the pandemic. Sometimes the transition can feel smooth and other times the journey to the new normal is choppy or downright bumpy! The experience of going to a dentist might be different now, but dental offices continue to remain safe.



How safe are dental clinics in context to COVID-19?

Patients' safety and protection is of utmost priority.

The dental offices are currently working to reduce the spread of infection by following the guidelines of OSHA (Occupational Safety and Health Standards) and CDC (Center for Disease Control & Prevention).

- * Limiting the number of patients by scheduling only fewer appointments at any given time.
- * By providing Hand sanitizers and Face masks.
- * By regular monitoring of staff for COVID-19 symptoms.
- * By screening the patients and those accompanying them for COVID -19 symptoms.
- * By providing protection such as barriers.
- * By keeping windows open to increase flow of air and to improve ventilation in dental offices.
- * By posting signs, visual alerts and posters at the entrance and strategic places to provide instructions to the patients.
- * Some dental offices also render phone advice/ virtual consultations.

Can people visit dental offices to seek routine dental care in COVID-19?

Regular dental visits are a key in reducing risk of developing caries, gum disease and oral cancer.

Do NOT Delay Dental Visits During Pandemic

The dental offices, the dentists and the dental personnel are adapting to “New Normal” as given by IPAC (Infection Prevention and Control).

What is this “New Normal”?

The many things that were very rare in the pre-COVID era will be now be considered as normal such as...

- * Screening all patients and staff for covid-19 signs and symptoms.
- * Asking patients to wait in the car instead of the waiting room to maintain social distancing.
- * Understanding multiple levels of PPE (Personal protective Equipment) to minimize cross contamination and patient protection by doctors and dental personnel.
- * Working in closed operatories where aerosols are created, to be carefully disinfected.
- * Paying attention to aerosol generating procedures and controlling them by using HVE (High Volume Evacuation) and HEPA (High Efficiency Particulate Absorbing) filters in operatories.
- * Using clean and disinfected areas, rooms and operatories by using EPA (Environmental Protection Agency) registered disinfectants.

PATIENTS STILL NEED TO BE PATIENT

Most practices are still catching up from the pre COVID operating situations to the current functioning with additional precautions, guidelines, and services. Patient’s safety is of utmost priority. The other priorities are likely to be:

- Patients requiring emergency dental care.
- Patients at higher risk of oral diseases like swelling, infection, and trauma.
- Patients with pending treatment needs.

Prior appointment scheduling is done to maintain social distancing and avoid crowding in the waiting area. Patients are requested to cooperate and abide by the norms, for their own safety.

What are dental appointments like?

Practices are using personal protective equipment such as masks, gloves and aprons and social distancing measures to keep staff and patients safe.

- If you call to make an appointment, you will be asked some screening questions. You’ll be asked those same questions again at your visit to see if anything has changed since the time of booking.
- You will probably be asked to use hand sanitiser or to wash your hands when you arrive (and again before you leave).
- You might also be asked to wear a mask while in the waiting area .
- You will also find that waiting rooms might look a little different with two metre markers in place adhering to the norms of social distancing.
- You will also notice that the dental team may be wearing different protective equipment apart from what you are used to seeing earlier.



- Appointments will be managed to allow for social distancing between patients. That might mean that you're offered fewer options for scheduling your appointment.

How you can help:

- Please do not arrive without an appointment.
- Except for children and persons in need of support, patients should come alone.
- Patients should attend wearing a mask if possible or be prepared to wear one. A distance of at least two metres must be observed if another patient is present in the dental practice.
- Please do not arrive early to the practice. If necessary, you should wait outside the practice.
- Staff will not shake hands with you.
- It is likely to be some time, before dental services can return to what you previously experienced as normal. However, your dental teams will be doing all that they can, to ensure you receive the treatment you require in the safest possible way.

THE NEW NORMAL 

We have all made sacrifices over the past few months to keep our families and communities safe. This collective effort has made a huge difference.

While restrictions are being lifted in some places, #COVID19 isn't gone yet. We must continue to protect ourselves and each other.




THE NEW NORMAL 

COVID-19 is merely biding its time, waiting for us to let our guard down.

So continue to practice protective measures like physical distancing, covering coughs and sneezes, and frequent handwashing

#StaySafe




Avoid the Three Cs 

Be aware of different levels of risk in different settings.

There are certain places where COVID-19 spreads more easily:






- 1 Crowded places**
with many people nearby
- 2 Close-contact settings**
Especially where people have close-range conversations
- 3 Confined and enclosed spaces**
with poor ventilation



The risk is higher in places where these factors overlap.

Even as restrictions are lifted, consider where you are going and #StaySafe by avoiding the Three Cs.

WHAT SHOULD YOU DO?

-  Avoid crowded places and limit time in enclosed spaces
-  Maintain at least 1m distance from others
-  When possible, open windows and doors for ventilation
-  Keep hands clean and cover coughs and sneezes
-  Wear a mask if requested or if physical distancing is not possible

If you are unwell, stay home unless you need to seek urgent medical care.



DENTISTRY

COVID-19 Office Protocols



Our new look with enhanced PPE. Same caring team to keep you smiling!



Please wear a mask before entering the office.



MOBILE CHECK IN
Leave your mobile number and wait in the car instead of the waiting room.



We will call or text you when your exam room is ready.



Please use hand sanitizer when you enter the office.



We will measure your temperature and ask you to gargle with 1% hydrogen peroxide.



We will ask some screening questions relating to COVID-19.



Only patients with an appointment and one guardian are permitted into the office.



Office free of magazines and toys, reducing highly touched items.



Social distancing in effect. Maintain 6 feet of distance at all times.



Please allow us enough time for enhanced disinfection protocols between patients.



Please reschedule if anyone in your household has been sick in the past 2 weeks.

Oral manifestations of COVID-19 infection

Dr. Bobby Joseph
Faculty of Dentistry, Kuwait University



The novel coronavirus, formally called COVID-19, is part of a family of viruses that includes the common cold and respiratory illnesses such as SARS. It affects the lungs and airways. For many people it causes mild symptoms, while for others it can be much more serious and require hospital treatment.

Coronavirus is extremely contagious. It spreads from person to person in much the same way as the common cold or flu does, by contaminated respiratory droplets such as coughs and sneezes. The average 'incubation period' is 5 days, although it could range from 1 to 14 days.

Severe acute respiratory syndrome corona virus 2 (SARS-CoV-2) is a single chain RNA virus which causes the novel coronavirus disease. Angiotensin converting enzyme 2 (ACE 2) receptor is a known receptor for the virus that is expressed in the lung, liver and gastrointestinal tract. The virus attaches itself to the ACE 2 receptors wherever they are present and cause symptoms specific to the organ.

What are the symptoms of coronavirus?

The most common symptoms of coronavirus include:

- a persistent, dry cough where you have had 3 or more coughing episodes in 24 hours
- a high temperature
- a loss or changed sense of taste or smell

Other include:

- shortness of breath
- a sore throat
- a blocked/runny nose
- stomach discomfort and diarrhoea
- confusion or delirium

Oral health and COVID-19

It has been proposed that ACE 2 receptors are highly expressed in oral mucosa such as the tongue, salivary glands and taste buds. As a result, the oral mucosa may serve as a portal of entry for the virus, allowing it to combine with ACE 2 receptors and cause oral mucosal lesions. One of the most common, well-recognized oral manifestations of COVID-19 is alteration of taste (dysgeusia) either with or without olfactory (sense of smell) involvement.

One of the contributory factor for dysgeusia could be a reduction in salivary flow (xerostomia) associated with COVID-19. Numerous oral lesions have been reported in COVID-19 individuals. The tongue, palate, lips, gingiva, and buccal mucosa are the most frequently involved oral regions.

It is unclear whether the oral lesions described are manifestations of COVID-19 or the results of immunosuppression and side effects of treatment.

Oral mucosal lesions

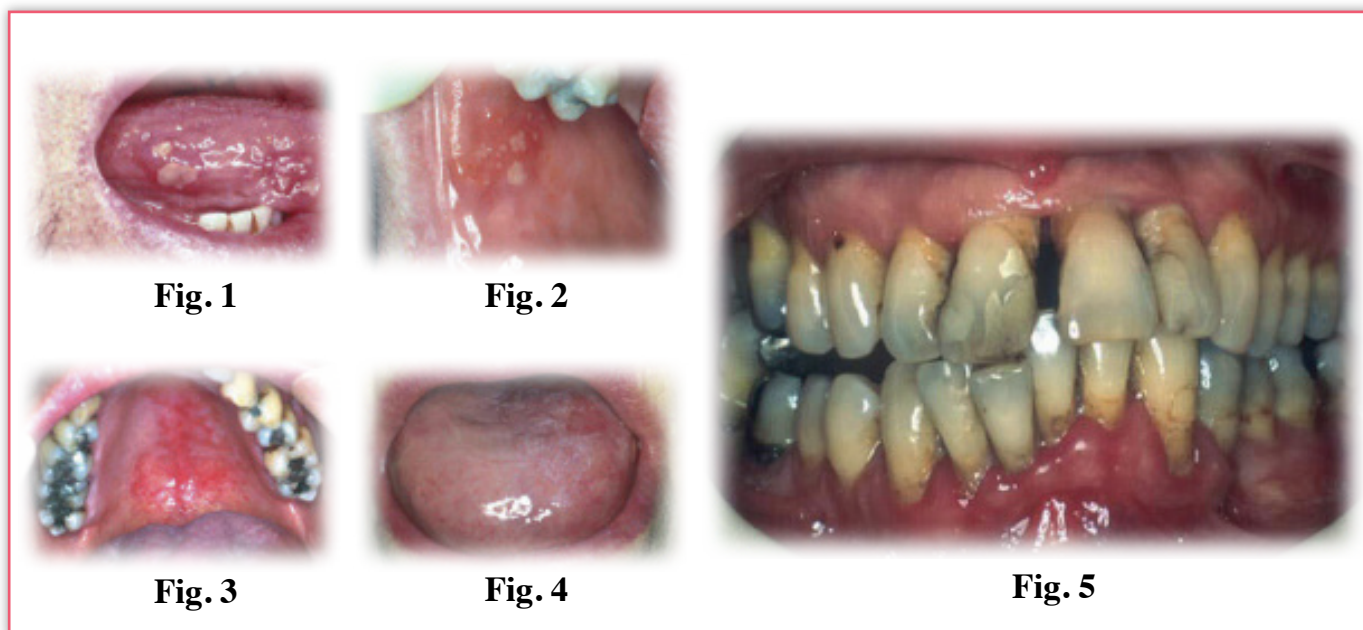
Oral mucosal lesions associated with COVID-19 are numerous and varied as shown in Table 1. The lesions reported range from ulcers, erosions, vesicles, bullae, mucosal pustules, papules and pigmentation, fissures and de-papillated tongue and haemorrhagic manifestations including petechiae, crusts and spontaneous bleeding.

Table 1 (data from case reports and case series)

Lesions	Oral manifestations
Aphthous-like lesions (Figure 1)	<ul style="list-style-type: none"> Numerous shallow oval ulcers with a yellow base and erythematous margin On both keratinized and non-keratinised mucosa Lesions healed within 10 days
Herpetiform lesions (Figure 2)	<ul style="list-style-type: none"> Multiple round, yellowish-grey small ulcers with an erythematous border Lesions healed after 2 weeks
Ulcer and erosions	<ul style="list-style-type: none"> Erosive or ulcerative painful ulcers with irregular borders Occur on the tongue, hard palate and labial mucosa
White/erythematous plaques (Figure 3)	<ul style="list-style-type: none"> Dorsum of tongue, gingiva and palate White patches diagnosed as candidiasis
Vesicles and pustules	<ul style="list-style-type: none"> Vesicular eruptions and erosions on the buccal mucosa and tongue Redness on hard palate with petechiae and pustules on soft palate
Post-inflammatory pigmentation	<ul style="list-style-type: none"> Mostly seen on attached and interpapillary gingiva
Depapillated tongue with glossitis (Figure 4)	<ul style="list-style-type: none"> Loss of papillae on the dorsal surface of tongue
Erythema multiforme-like lesions	<ul style="list-style-type: none"> Target-like lesions on skin and lips Presented as blisters, macules, desquamative gingivitis, erosions and cheilitis, Some lesions presented with haemorrhagic crusts
Necrotizing periodontitis (Figure 5)	<ul style="list-style-type: none"> Painful, diffuse erythematous and oedematous gingiva with necrotic inter-papillary areas
Melkerson-Rosenthal syndrome	<ul style="list-style-type: none"> Malaise and unilateral lip swelling, fissured tongue Right facial paralysis
Non-specific lesions	<ul style="list-style-type: none"> Erythematous-violaceous macules, and patches of red areas

Conclusions

Several systematic reviews, case reports and case series describe a high prevalence and frequency of xerostomia and aphthous lesions in patients with COVID-19, although a causal link is difficult to establish on the basis of studies published so far. To establish the cause-and-effect association of the underlying oral lesions, well-designed prospective cohort or case control studies are clearly required.



Note: All figures presented in the article are representative of lesions that could present in a COVID-19 patient.

ORAL HYGIENE DURING COVID-19

Dr. Tiny Elsa Thomas
School Oral Health



Oral health is critical to people's mental health, physical health, and their well-being.

A Clean Mouth is Important Too!



Much emphasis has been on having clean hands, however maintaining a clean mouth can be significant during this pandemic too.

Current evidence suggests the novel Coronavirus can be transmitted directly through airborne transmission of droplet and aerosols from the mouth. Contaminated surfaces can then indirectly transmit the virus as studies have shown that they may remain viable for hours to days on certain surfaces.

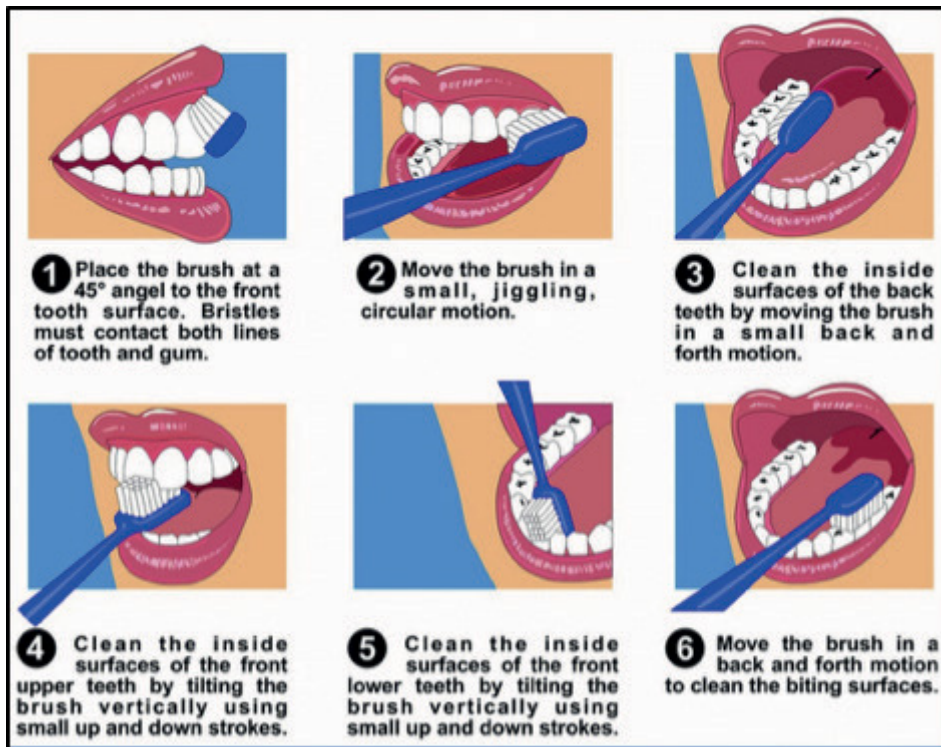
The mouth is the most common entrance and outlet of droplets and aerosols that contain the virus. It can be spread while sneezing and coughing, however evidence has shown it can be transmitted even when just speaking, shouting, or singing.

Saliva contains discharges from the nasopharynx and the lungs where the Coronavirus is known to be present. Keeping a clean mouth may help in efforts to prevent the spread of the disease..

Oral Healthcare Tips During COVID-19

Since the SARS-CoV-2 virus appears to colonize in the mouth, maintaining good oral hygiene at home is more than just trying to prevent cavities, gum disease, and other conditions.

Brush your teeth two times for two minutes and use a fluoridated toothpaste.



Floss and use an antiseptic mouth rinse daily with 1.5% hydrogen peroxide-based rinses (e.g. Colgate Peroxyl, Oragel, etc)

How to Keep a Healthy Mouth?

Many of us are overdue for our regular checkup during this pandemic. Daily oral care is now ever so important!

- Use fluoridated toothpaste and water to help prevent tooth decay.
- Prevent oral conditions by decreasing or eliminating alcohol, tobacco and drug use.
- Practice sensible healthy nutrition with less hard and sticky food to help protect teeth.
- Don't overlook any oral problem symptoms and seek care when and where possible as many dental services are now available.
- Take advantage of tele dentistry consultations which are available from many dental providers.

Clean & Disinfect Your Toothbrush

Many people do not realize their toothbrush can harbor bacteria, blood, and saliva. Not only does improper toothbrush care result in poor oral hygiene over time, but it can also spread contagious diseases, such as COVID-19. The coronavirus can stay on surfaces for up to three days, and this may include toothbrushes. To disinfect your toothbrush daily, rinse it in 0.5 percent hydrogen peroxide for up to 15 minutes. Make sure you rinse off your toothbrush before brushing.

Lastly, don't forget to replace your toothbrush regularly. Everyone is supposed to replace their electric toothbrush head or disposable toothbrush every 3 to 4 months.

Dental Hygiene Tips for COVID-19 Positive Patients

Oral hygiene should not be neglected during the COVID-19 condition. Here are some tips to stay safe:

- Try to store oral health products separately during illness.
- Disinfect all oral health tools and products daily.
- Discard and replace the toothbrush and toothpaste after recovery.

- Clean your hands before oral care.
- Disinfect with hydrogen peroxide or rinse your toothbrush under hot water for a few minutes.
- Always dry in an upright position with fresh air.
- Never share your toothbrush.
- Avoid powered toothbrushes and Water Piks which may produce more aerosols than manual toothbrushes.

It has been a big message that washing the hands help prevent contracting COVID-19. Avoid touching the face, lips, mouth, eyes, and ears with potentially contaminated hands. Studies show that people touch their face approximately 23 times in an hour and this can pose a virus threat through mouth, nose, or eyes. When a person's hands touch their own mouth and have the virus in their saliva, they can potentially transfer it to others. It is this cycle of clean hands and mouth that is important to curb the pandemic.

Does poor oral health have an association with COVID-19?

Four essential risk factors for severe COVID-19 have been identified: diabetes, high blood pressure, heart disease, and obesity. All these have also been associated with poor oral health. If an individual has gum disease, the increased risk association for heart disease is 25%, high blood pressure is 20% and 3 times the risk for diabetes. Evidence also exists on poor oral health and associations with severe respiratory complications. 52% of the deaths occurred in healthy individuals and 20% of those had high oral bacterial levels that may have affected the progress of COVID-19 disease.

Improving oral hygiene and oral health may prevent the potential risk of the airway superinfections of those infected with COVID-19.

How to Treat "Mask Mouth"

Wearing a mask helps limit droplets and aerosols from our nose and mouth from transferring to one another. Some have become aware of mouth odors when wearing a face mask. More than 50% of the general population have halitosis or bad breath.

Wearing a mask can cause the saliva and moist air to cling and dry onto masks to cause a bad smell. Many people breathe through their mouths when wearing a mask which can cause dryness, produce mouth odors, and increase risk for cavities.



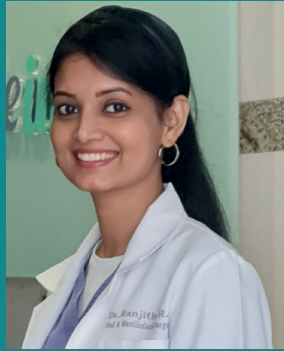
Remember to focus on good oral hygiene at home, to have a healthy mouth and reduce odors from mask mouth.

- Brush your tongue and rinse with a good mouthwash.
- Watch what you eat as that can contribute to a smelly mouth.
- Check your medications which can cause a dry mouth and add to bad breath.
- Keep hydrated and find dry mouth products to use.
- Quit smoking if you're thinking about that right now as that can give you lingering odors and increase your risk for oral problems.
- Keep your mask clean and fresh.

'BLACK FUNGUS'-MAIMING COVID PATIENTS

Dr. Ranjitha RS

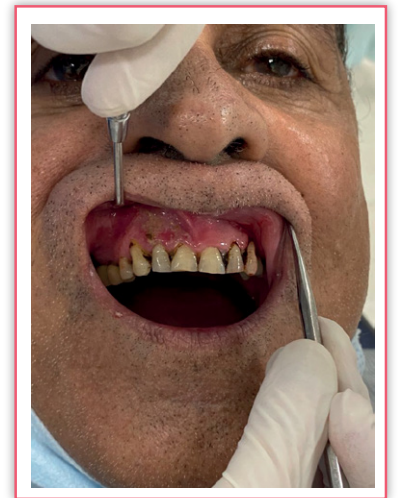
***Oral Maxillofacial Surgeon and Implantologist,
Smileinn Specialised Dental Center***



Black Fungus also known as MUCORMYCOSIS is an opportunistic fulminant fungal infection, which mainly infects immunocompromised patients. These fungi live throughout the environment. They live in soil and in decaying organic matter such as leaves, compost piles or rotten wood. When these spores are inhaled or enter the body through open wounds person gets infected.

Different forms of Mucormycosis

1. Rhinocerebral (sinus and brain) - Occurs after someone inhales the spores from air. The infection from oral cavity and sinus can spread to brain. Common in uncontrolled diabetes and kidney transplant patients.
2. Pulmonary (lungs)-Involving the lungs. Common in people with cancer, organ transplant and stem cell transplant.
3. Gastrointestinal (stomach and intestine) - Common among children than adults. Premature and low birth weight infants less than 1 month of age are at risk if they have had antibiotics, surgery or medications that lower the body's ability to fight germs and sickness.
4. Cutaneous (skin) - Affects mainly the skin, through abrasion or break in skin. Occurs after burn, scrape, cut surgery or other types of skin trauma.
5. Disseminated (widespread) - Occurs when the infection spreads through the blood stream from one part of body to another. Mainly affects brain but also affects other organs such as spleen, heart and skin.



Symptoms

Some common symptoms of Mucormycosis are:

- Swelling of the face and around the eye, usually on one side
- Facial pain or headache, usually on one side
- Red eye, usually on one side
- Black patches on the nose or the roof of the mouth: if you have these, please speak to a health care provider urgently
- Fever
- Loosening of teeth /discoloration or ulceration on palate
- Nasal discharge or crusting which could be brownish or blood tinged
- Discoloration of skin of face

Many of these symptoms, such as fever and headache, are also common symptoms of other diseases, including COVID-19. Mucormycosis needs to be confirmed through a laboratory test by your health care provider. If you are at greater risk and have these symptoms, consult your health care provider.

How is Mucormycosis detected?

The usual modalities for a health care provider to confirm the presence of the fungus are as follows:

- Samples from the inside of your nose or a sinus for laboratory testing.
- To spot the fungus under a microscope or grow it using 'fungal culture'.
- Camera-based (endoscopy) tests of the sinuses, the head or the lungs might also be helpful if advised by your health care provider.
- Imaging tests such as CT scans of the lungs, sinuses or other parts of body depending on the location of suspected infection may also be used to support the diagnosis.



What is the Treatment?

Strictly follow your healthcare provider's advice.

- Mucormycosis needs to be treated with antifungal medicines. Liposomal Amphotericin B is the drug of choice and needs to be initiated early. Other antifungals like Posaconazole or Isavuconazole have also been described. These can only be used with the prescription of a health care provider.
- In some cases, surgery may also be needed around the eyes and nose.
- Do not self-medicate – these drugs can have harmful effects if they are not used properly.

The overall prognosis depends on several factors including the rapidity of diagnosis and treatment, site of infection and patients' underlying conditions and degree of immunosuppression. The gross case fatality is 50 % although early diagnosis and treatment leads to better outcomes.

How can we protect ourselves?

There is no vaccine for Mucormycosis. Prevention of COVID 19- related Mucormycosis needs to focus on underlying risk factors. A few points to keep in mind;

1. Aiming for better glycemic control in those with diabetes.
2. Appropriate use of systemic corticosteroids.
3. Prevention of unnecessary use of antibiotics, antifungals and immunomodulators.

Most healthy people are at very low risk of this disease.

Specific measures at the facility level are essential to prevent the spread of this pathogens.

These include

- Sterilization and disinfection of equipments used by multiple patients (tracheal tubes, ventilators), ventilation in hospital that can contribute to dampness and dust.
- Proper wound management.
- Proper line management in health facilities.

Those at higher risk could reduce their risk by protecting themselves from the fungi in the environment:

- Maintain proper oral hygiene.
- Avoid areas with a lot of dust, like construction sites.
- Avoid damp buildings such as those damaged by water, for example, due to floods and cyclones.
- Avoid close contact with soil.
- Wear clothes that cover your arms and legs while working outdoors, and wear shoes while for outdoor work.
- If you cut your skin, clean the injury area with soap and water.

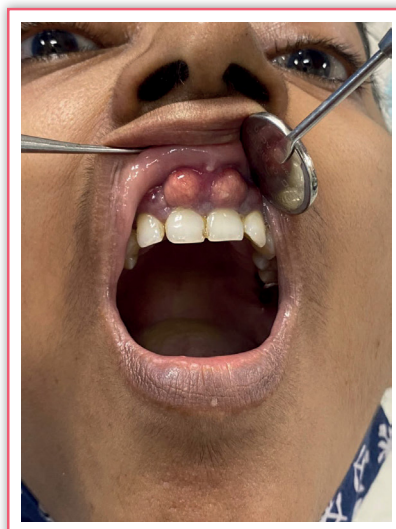
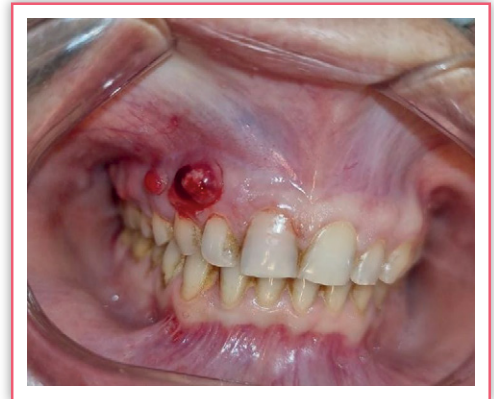
Conclusion

COVID-19 infection is a novel infection causing systemic and oral manifestations. Massive use of antibiotics, antibodies, steroids during the management of COVID-19 have caused increase in several bacterial, fungal, and viral infections. Increased blood glucose levels in COVID-19 infection in turn serves as a risk factor for development of Mucormycosis.

Individuals should be aware of COVID-19 associated secondary infections for early identification of the same. Delay in the identification or delay in initiation of the management will lead to extensive progression of the disease. Hence early diagnosis and planning the process of management, plays an important role.

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SPECIAL CONSIDERATIONS FOR SPECIAL NEEDS

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What is Special Care Dentistry?

Special care dentistry is the branch of dentistry that is concerned with prevention, maintenance and rehabilitation of oral health of individuals who have some form of disability. This includes physical, mental, intellectual, social, emotional and medical impairment.

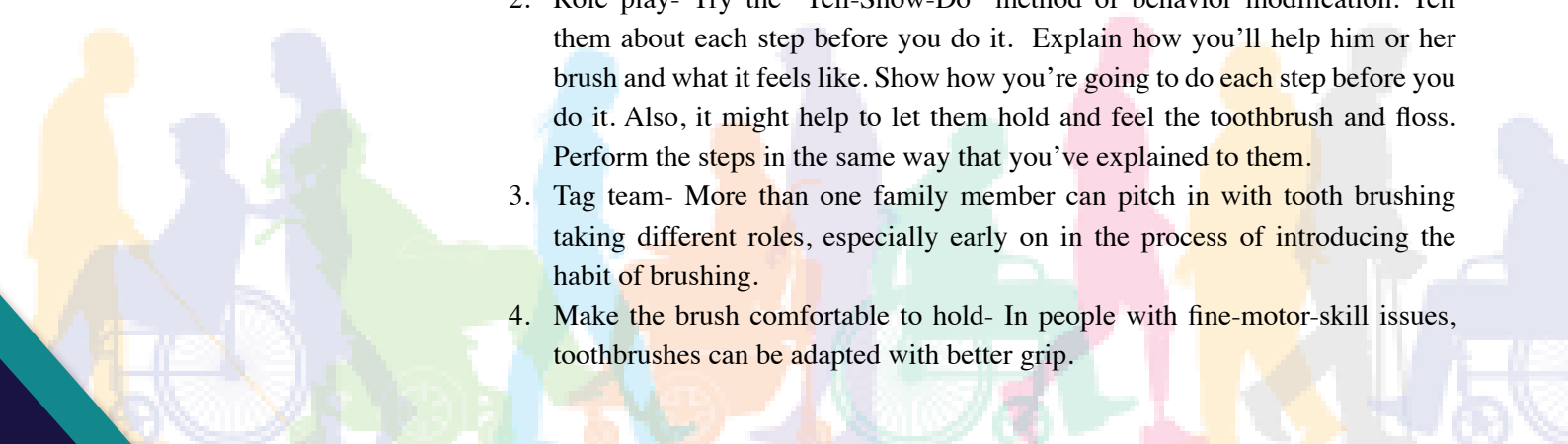
AS A PARENT WHAT WE NEED TO KNOW?

- Pediatric dentists are the dental professionals of choice for children with special needs.
- It is recommended to visit a pediatric dentist by your child's first birthday or when the first tooth appears.
- It is always better to see the same dentist and same staff for every appointment.
- Tooth decay is almost 100 percent preventable: All children benefit from a preventive approach – proper brushing, use of fluorides, flossing, limited snacking and regular visits with a pediatric dentist.
- Practice makes perfect- Children with special needs require more assistance and practice in taking care of their teeth.
- Be patient- Give them time to adjust to dental care. Be patient as that person learns to trust you.

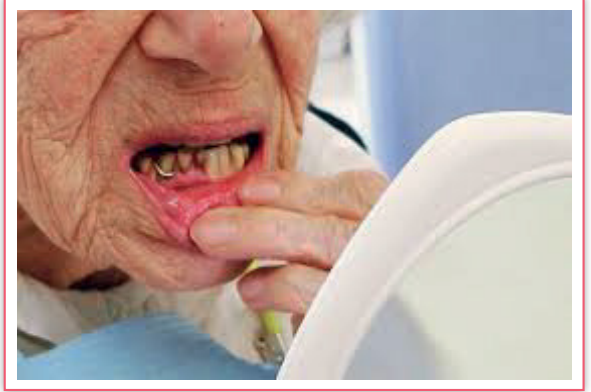
HOW TO MAKE TOOTH BRUSHING A POSITIVE EXPERIENCE?

Tips for helping people with Special Needs Brush Their Teeth

1. Location. The bathroom isn't the only place to brush someone's teeth. Choose a place which is most comfortable for them. No matter what location you choose, make sure you have good light. You can't help someone brush unless you can see inside that person's mouth.
2. Role play- Try the "Tell-Show-Do" method of behavior modification. Tell them about each step before you do it. Explain how you'll help him or her brush and what it feels like. Show how you're going to do each step before you do it. Also, it might help to let them hold and feel the toothbrush and floss. Perform the steps in the same way that you've explained to them.
3. Tag team- More than one family member can pitch in with tooth brushing taking different roles, especially early on in the process of introducing the habit of brushing.
4. Make the brush comfortable to hold- In people with fine-motor-skill issues, toothbrushes can be adapted with better grip.



5. Power toothbrushes- Electric toothbrushes are more efficient, easier to manipulate, and more attractive to those with disabilities. Advances in design and types of electrical toothbrushes may improve oral hygiene.
6. Play a game- "Make it a more fun and playful, but always reinforce with praise.
7. Put on some Tunes-Playing music might be helpful to get them to brushing for a significant amount of time without getting bored.
8. Routine for dental care- Use the same technique at the same time and place every day. A routine might soothe fears or help eliminate problem behavior.



Are people with SHCN more at risk of contracting COVID-19 from dental offices?

- YES !!!- They have a greater risk of contracting COVID-19 because of their:
 - Difficulty in understanding and acting on the instructions provided by their dentist.
 - Relative inability to practice proper hand hygiene techniques.
 - Underlying health issues.

Has the need for dental care among SHCN patients increased during the pandemic?

- YES!!! COVID has overwhelmed most health care facilities around the world. This has put more strain on the normal functioning of the various healthcare facilities catering to the SHCN population.
- Disruption to the provision of normal routine dental care has increased the prevalence of dental diseases in SHCN population.
- Since only dental emergencies were prioritized during the pandemic, non-urgent dental care was ignored, which could have negatively impacted SHCN population.

What are the preventive strategies recommended for good oral health among SHCN?

- Individuals with SHCN are at increased risk of having oral diseases that jeopardize the overall health and quality of life.
- Parents/ care givers should have a good knowledge on appropriate and routine supervision of daily oral hygiene.
- Seek the help of a dental care provider to develop a customized individual oral hygiene program. To prevent oral diseases, it is important to emphasise on the importance of brushing twice daily with fluoridated toothpaste.
- To improve the compliance, use of modified toothbrush and electric brushes are recommended.
- For long term prevention of oral diseases, diet modification that mainly includes non- cariogenic diet is highly suggested.
- Professional preventive treatment will be highly beneficial.
- The patient/ family/ care giver should be familiar with the community-based resources available for patients with SHCN.



Does the dentist face newer challenges in treating patients with SHCN due to COVID-19?

- YES!!! A large number of patients would be deprived of routine oral health maintenance and preventive visits as dentists prioritized emergency care over routine procedures.
- In addition, published reports have suggested an increase in the prevalence of oral diseases world-wide. This would in-turn lead to an increase in the utilization of dental care facilities thus increasing the dentists' workload.

What are some important points to note during dental visit in COVID -19 times?

- The dentist and his team need to be aware of how COVID-19 has affected the families.
- New patterns or changes in behavior that might affect the patient's oral health and dental care need to be identified and reported.
- Prior to dental visit be informed about the new changes at the dental office.
- Social stories and visual aids can be used to manage patients with SHCN.
- Mask wearing and new settings of the dental practice could be familiarized through social stories.

What were the challenges faced by the caregivers of SHCN patients during COVID-19 pandemic?

- Susceptibility and severity of the oral diseases have increased during the pandemic, which has increased the caregiver's burden to ensure adequate care for patients with SHCN.
- Due to the mandatory physical distancing norms, assisted oral hygiene has become a challenge.
- Risk posed in providing assisted care is greater than the benefits.

What were some of the measures taken to lower the burden of caregivers of SHCN patients during COVID-19 pandemic?

- Use of telehealth services and adopting guided oral hygiene practices.
- Audio and video technologies to be used to carry out self-care oral hygiene on a schedule basis.
- Self-care guided by the professionals through technology is highly recommended for those dependent on caregivers.
- Increased preventive measures with respect to oral health.

Lessons learnt and the road ahead.

- A necessary change in perception towards oral health from Treatment to Prevention.
- Improve the lifestyle, promote use of healthy diet low in sugars.
- Use of fluoridated water, topical use of fluoridated toothpaste.
- Practice and maintaining adequate oral hygiene
- Improving oral health knowledge.
- Communication and information via tele dentistry will reduce the burden for those seeking dental care at overwhelmed emergency dental departments.
- In situations where dental visits are inevitable, ensure appointments are defined and spaced to ensure adequate distancing.
- Limit the number of bystanders to one during visits.
- Patients and their families should receive appropriate orientation on protective measures and respiratory hygiene.



CO-MORBIDITIES IN COVID -19

Dr. Rino Roy

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INTRODUCTION

In medicine, comorbidity is the presence of one or more additional conditions often co-occurring with a primary condition. Comorbidity describes the effect of all other conditions (i.e. diabetes, heart diseases) an individual patient might have other than the primary condition of interest, like COVID-19, which can be physiological or psychological. Comorbidity is most often defined in relation to a specific index condition, as in the seminal definition of Feinstein: “Any distinct additional entity that has existed or may occur during the clinical course of a patient who has the index disease under study.”

Various comorbidities in COVID-19 patients were found to be associated with higher disease severity and worse outcome and death. A meta-analysis that included 76,993 patients with COVID-19 showed that most common comorbidities associated with poorer prognosis were diabetes mellitus, hypertension, cardiovascular diseases, smoking, chronic obstructive pulmonary disease, malignancy, and chronic kidney disease. Understanding of the role of ethnicity and socioeconomic status in the risk of acquiring COVID-19 infection and outcome is important for health service planning, targeting prevention efforts and future vaccine development. Comorbidity is associated with worse health outcomes, more complex clinical management and increased health care costs.

RESEARCH

1. Comorbidities that are supported by at least one meta-analysis or systematic review or by scientific evidence briefly include:

- Cancer
- Cerebrovascular disease
- Chronic Kidney disease
- Chronic lung diseases
 - Interstitial lung disease
 - Pulmonary embolism
 - Pulmonary hypertension
 - Bronchopulmonary dysplasia
 - COPD (chronic obstructive pulmonary disease)
- Chronic liver diseases
- Diabetes mellitus, type 1 and type 2
- Heart conditions (heart failure, coronary artery disease, Cardiomyopathies)
- Obesity (BMI> 30kg/m²)

- Smoking
- Tuberculosis

2. Comorbidities that are supported by at least one observational study:

- Children with certain underlying conditions
- Down syndrome
- HIV
- Neurologic conditions
- Overweight (BMI > 25 kg/m²)
- Immunosuppressive

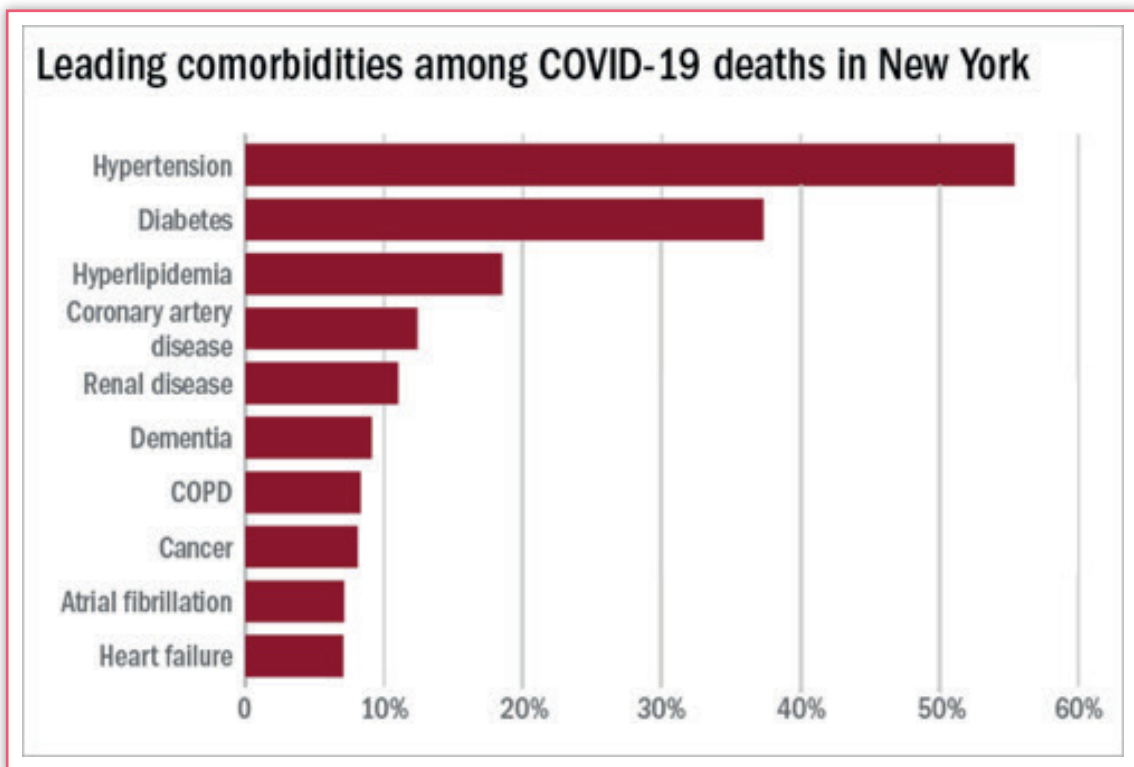
3. Comorbidities that are supported by mostly case studies, case reports:

- Cystic fibrosis
- Thalassemia

4. Comorbidities that are supported by mixed evidence:

- Asthma
- Hypertension
- Immuno-deficiencies

Underlying Medical Conditions Associated with Higher Risk for severe COVID-19: Information for healthcare Providers (Courtesy: CDC, Centers for Disease Control and Prevention; Updated Oct. 14, 2021)



People having medical conditions like hypertension, diabetes and heart diseases had the worst outcomes with COVID-19 infections. 86.2% of the state's 5,489 COVID-19 deaths involved at least one comorbidity. (Courtesy: Data reported daily by hospitals, nursing homes, and other health care facilities. New York State Department of Health, 2020)

Comorbidity	Y/N (number in subcategory)	Survived (% within subcategory)	Died (%)	Univariate P value
Obesity	N (766)	694 (90)	72 (9.4)	0.11
	Y (216)	187 (87)	29 (13)	
	Unknown (93)	93	0	
Diabetes	N (741)	690 (93)	51 (7)	<0.001
	Y (334)	284 (85)	50 (15)	
Hypertension	N (820)	760 (93)	60 (7)	<0.001
	Y (255)	214 (84)	41(16)	
Cardiovascular disease	N (988)	905 (92)	83 (8)	<0.01
	Y (87)	69 (79)	18 (21)	
COPD	N (1073)	972 (91)	101 (9)	>0.5
	Y (2)	2 (100)	0 (0)	
Asthma	N (1045)	946 (91)	99 (9)	>0.5
	Y (30)	28 (93)	2 (7)	
Chronic renal disease	N (1026)	937 (91)	89 (9)	<0.01
	Y (49)	37 (76)	12 (24)	
Liver disease	N (1071)	972 (91)	99 (9)	<0.0
	Y (4)	2 (50)	2 (50)	
Malignancy	N(1057)	962 (91)	95 (9)	<0.01
	Y (18)	12 (67)	6 (33)	

Mortality rates were higher in people with comorbidities as compared to healthy individuals infected by Covid-19. (Courtesy: Asma Deeb et al; Published 3 March 2021; Impact of Ethnicity and Underlying Comorbidity on COVID-19 In hospital mortality: An Observational Study in Abu Dhabi, UAE. N represents NO underlying medical conditions; Y represents YES to presence of underlying medical conditions.)

RESULTS

- Comorbidities of hypertension, diabetes, cardiovascular disease, chronic renal disease, liver disease and malignancy were associated with higher risk of mortality in COVID-19 patients.
- It can be concluded that COVID-19 in - hospital mortality is higher in older people and those with comorbidities.
- Men and older patients with comorbidities required longer hospitalization.
- It's hard to confirm that ethnicity impacts the risk of mortality among those hospitalized for the disease.

Finally, a newly emerging construct is that of patient complexity. This acknowledges that morbidity burden is influenced not only by health-related characteristics, but also by socioeconomic, cultural, environmental, and patient behavior characteristics. From a clinical perspective, it will be obvious that disease factors interact with social and economic factors to make clinical management challenging, time-consuming and resource intensive. Capturing and measuring this complexity, however, remains a challenge. Improved understanding of such interactions among comorbid diseases is important to improving clinical care.

MAIN FINDINGS

1. Certain underlying medical conditions increased the risk for severe COVID-19 illness in adults.
2. Having multiple conditions also increased the risk of mortality.
3. Obesity, diabetes with complications, heart diseases and anxiety during COVID-19 illness had strong association with death.
4. The risk associated with a condition increased with age.

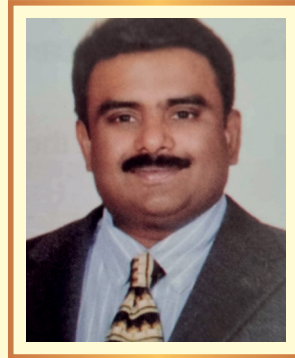
GUIDELINES FOR CARE PROVIDERS

1. Approved and authorized COVID 19 vaccines which are safe and effective should be administered to people with underlying conditions. Reassure patients of its safety and efficacy.
2. Check out additional information for your patients.
3. Encourage patients to keep appointments for routine care and adhere to treatment regimens.
4. Consider use of tele-health for patients who have knowledge and access to Internet and technology.
5. Encourage patients with medical conditions to continue practicing preventive measures such as wearing a mask and physical distancing. It is more important for those with increasing age and number, and severity of underlying conditions, to practice preventive measures.
6. Carefully consider how to facilitate access to culturally and linguistically appropriate resources.
7. Encourage patients to conduct medical tests for any underlying medical condition and receive regular medical check-ups.

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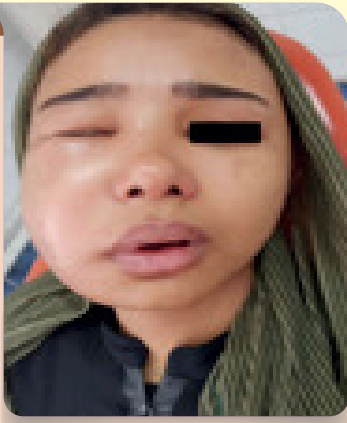
ALL IN A DAY'S WORK



Dr. T. Natesh Kumar
Oral & Maxillofacial Surgeon
Amiri Dental Casualty

A diverse range of patients come to 24-hour Dental Casualty clinics seeking remedies to dental ailments. The following Q & A section is an example of a regular day in the casualty. It is by no means a comprehensive source of information regarding dental treatment. Its sole purpose is to educate the public on how to manage a few dental issues as and when they arise. Always remember "Prevention is better than Cure."





6 AM

Q. I developed a swelling around my right eye when I got up this morning. I went to the medical casualty and they referred me to the dental emergency. Can I get this swelling because of my teeth?

A. Swelling in any portion of your face might be caused by an infection from your teeth spreading through the tissues. Infection spreads from the front upper teeth to the lip, nose and palate. Infection from the canine-premolar region can spread around your eye. Infection from the upper molars can spread to the cheeks. Infection from the lower teeth has the tendency to spread under the jaws.

So, it is critical to examine and get X-rays to determine the source of infection. If it is of dental origin, depending upon the condition of the tooth; the treatment may be root canal treatment or extraction. If a collection of pus or an abscess is present; the dentist may opt to incise and drain the collected pus to prevent further spread of infection.



7 AM

Q. I found blood on my pillow and when I washed my mouth, there was a lot of blood. I have bleeding from my gums. What should I do?

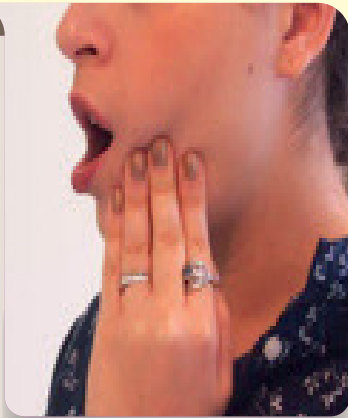
A. Bleeding from the mouth and bleeding gums can be from multiple reasons, including certain medical conditions. However, a vast majority of the patients have the world's most prevalent condition, Periodontitis, meaning infection of the gums. The cause is improper oral hygiene. Treatment options depend on severity of the disease, beginning with simple scaling and oral hygiene instructions to a periodontal specialist consultation.



8 AM

Q. Doctor, my front tooth crown fell down. I have an important meeting in one hour. What do I do?

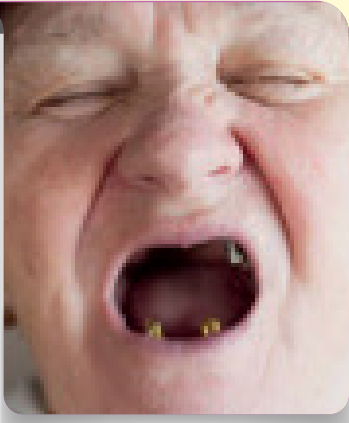
A. Crowns and Bridges are dental prostheses (artificial replacement of normal tooth structure to preserve form and function of missing or impaired natural teeth). When you are treated with such crowns and bridges, it is critical to preserve such crowns and bridges with proper oral hygiene and regular checkups. Crowns that have dislodged can be replaced or cemented when natural tooth supporting the crown is not damaged. It can be cemented temporarily in the casualty clinic and should be followed up by a specialist -Prosthodontist.



9 AM

Q. My wife is unable to close her mouth. She was eating a double cheese burger and we heard a click before that. What do we do?

A. The movement of the lower jaw, called the mandible, helps to open and close the mouth. It moves by double hinged joints called the temporomandibular joints (TMJ). TMJ dislocation can occur for a variety of reasons including excessive opening of mouth, weakened tissue supporting the joint, joint disorders and trauma. If there is no fracture of the bones, the lower jaw can be repositioned and stabilized for a few days to prevent recurrence.



10 AM

Q. My 70-year-old mother has a few teeth that are moving and she can't eat because of pain. What can I do?

A. Extraction of the few remaining teeth and consultation with a prosthodontist (specialist in artificial teeth) are recommended. However, a clear medical history is required to prevent complications during treatment. A medical clearance may be needed if there are multiple medical complaints .



11 AM

Q. My son, who has returned from abroad and is under quarantine, has severe tooth ache. What should I do?

A. You must use the helpline in your Shlonik application to contact the doctor for online consultation. If your condition is an emergency, you will be referred to special clinics that have been created for treating COVID-positive patients and persons in quarantine depending on your place of residence.



12 PM

Q. My newborn baby has a small bump like a tooth and is not feeding well. My doctor referred me to see a dentist.

A. Natal teeth are small tooth like structures found at birth. These teeth are generally removed since they are not fully formed. Neonatal teeth, on the other hand, are teeth that erupt in the first month of birth. They are usually front milk teeth and may cause tongue ulcers. If they are loose, causing difficulty in feeding, they need to be extracted after pediatrician consent by a pedodontist (Child Dentist).



1 PM

Q. My 2-year-old boy slipped and has injured his lip. It is bleeding profusely and he is crying.

A. Minor soft tissue injuries are seen frequently in children. Minor bruises, laceration of lip and frenum (mucosal fold connecting upper lip to gums and also that extends from beneath the tongue to the floor of mouth) recovers without any treatment. The dentist may opt to suture larger wounds to prevent recurrent bleeding and infection.



2 PM

Q. My 6yr old came home from school crying that his front tooth is broken and moving on its own. She had not fallen down or injured herself.

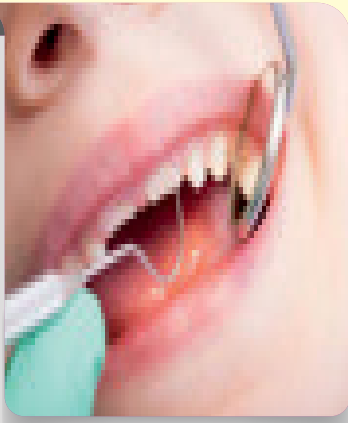
A. Children begin to lose their milk teeth called deciduous teeth. It is a normal process in which all their 20 milk teeth will be eventually lost and replaced by 32 permanent teeth. This process starts around 6 years of age. By 14 years, all milk teeth are shed and replaced by 28 permanent teeth. The remaining 4 teeth are called the wisdom teeth, which normally appear after 18 years of age.



3 PM

Q. I am 19 years old and I have pain behind my last tooth. I have a slight swelling and also unable to open my mouth. It appears to be my wisdom tooth. What should I do?

A. Yes, wisdom teeth usually emerge after the age of 18 yrs and the inflammation of the mucosa overlying the crown of the erupting tooth is called pericoronitis. We need to obtain a radiograph called OPG or Panoramic view to check the position of the wisdom tooth to decide the treatment plan.



4 PM

Q. I have a special needs child who has several decayed teeth. What should I do?

A. There are special needs clinics in all dental specialty centers of MOH. If the child is not medically compromised and is co-operative, then she/he can be treated in polyclinics situated in your area of residence.



5 PM

Q. I am an expatriate. My child requires dental check-up. Where should I go?

A. You could visit your general dentist located in your area polyclinic center. You must have a valid civil ID for both you and your child. From there, you will be directed to the child dental unit in specialty dental centers. Further information is available in Kuwait Government Online Applying for Child Dental Treatment .



6 PM

Q. My dental implants, which were done abroad, have fallen out. What do I do now?

A. In most of the cases it is the crown that comes off, which may be reinserted in clinics that specialize in implants. However, if there is a failure of the implant itself, due to infection or bone loss, it must be replaced by a new implant. If the implant is loose, avoid chewing on it as it may result in breakage of its components. Consult an Implantologist to secure the loose abutment as early as possible and to address your queries.



7 PM

Q. My 2-year-old has fever for the past 2 days coupled with bleeding gums and bad odour from his mouth. The paediatric casualty referred me for dental evaluation.

A. This is a common pediatric infection caused by Herpes Simplex virus which is highly contagious. It is usually noticed before the age of 6. The child manifests red inflamed bleeding gums along with a tiny cluster of blisters in the mouth. Usually, it is self-limiting. Drinking enough water helps in preventing dehydration. Topical antiseptic and analgesic gels along with antipyretics to manage fever and pain is prescribed. A pediatric consultation is advisable to assess the need for antiviral or antibiotic medication to prevent complications.



8 PM

Q. I am 5 months pregnant. I have severe pain in my teeth. The dentist I visited says he has to take an x-ray to treat me. I am worried that the radiation would affect the baby.

A. Dental x-rays have a relatively low radiation dose. According to American dental association and the American OBGYN association, intra oral dental x-rays do not harm pregnant women or the baby. On the other hand, dental x-rays are avoided during the 1st trimester (3 months). During the remaining 6 months, dental x-rays with lead apron is considered quite safe. Furthermore, minor dental procedures can be performed during 2nd & 3rd trimester under local anaesthesia.



9 PM

Q. My 11-year-old son was playing in an amusement park and broke his front central tooth. What should I do?

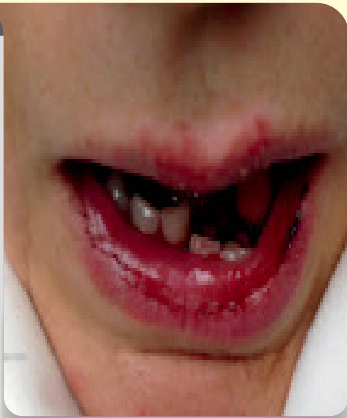
A. Your son's front teeth are permanent teeth. Management /treatment depends on how badly it is damaged such as the level at which it is broken/fractured, as well as if it is displaced or mobile. The dentist may decide to partially remove the pulp, cover the injured tooth with a suitable cement to initiate and allow completion of root formation. The alternative would be root canal treatment (RCT). Extraction may be the sole option in severe circumstances if the root fracture is completely unfavorable. If the injured tooth or teeth is mobile, then they are positioned and stabilized within their respective sockets with splints for a period of 2-3 weeks or more. This allows the tooth to heal and reattach. Follow-up in a specialized paediatric clinic is essential.



10 PM

Q. I fell down in the ice-skating rink and my permanent front tooth completely dislodged and fell out. What do I do?

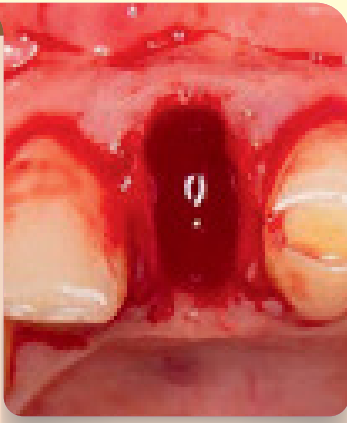
A. This type of injury is called "avulsion". If the tooth is completely dislodged and is unharmed then immerse it your own saliva, clean water or milk as quickly as possible. Please take it to your nearby dental clinic or casualty. The avulsed tooth can be successfully reimplanted/reattached if the treatment is initiated within the first hour. The chances of failure depends on the time taken. Once taken, the dentist will clean the debris off the tooth and in your mouth. Then the tooth is reimplanted back into its socket and stabilized as mentioned above. In some cases, RCT may be required. Regular check-up is mandatory.



11 PM

Q. While playing football, my mate's head rammed into my chin. I now have pain in my lower jaw and cannot open my jaw completely.

A. Sport injuries, RTA and assaults can cause fractures to the jaw and facial bones. Casualty clinics refer patients to dental casualty clinic after triage and clearance from other major injuries. Clinical examinations and radiographic investigations are undertaken to decide the course of treatment. Bleeding from soft tissue injuries is cleaned and sutured. Dental and minor fracture of bones supporting the teeth can be stabilized and fixed in the clinic. In case of major fractures, the fractured fragments must be returned to a stable position and immobilized using stainless steel wires. An on-call maxillofacial surgeon should be informed to carry out the major dental procedures in an hospital-based operation theatre.



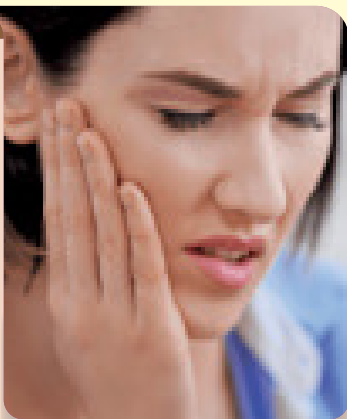
12 AM

Q. I extracted my tooth this evening but there has been heavy bleeding for the past 6 hours. What should I do?

A. Post- extraction bleeding seldom occurs if instructions are followed: -

- ☒ Bite tightly on the gauze without moving or changing it frequently.**
- ☒ Swallow saliva without holding it in the mouth.**
- ☒ Inform dentist of your medical history.**

Compression packs and styptic medicines are commonly used to reduce bleeding. Sutures, followed by medication is performed to initiate clot formation . A blood test is required in circumstances when the medical history is uncertain.



1 AM

Q. I have severe pain in the right side of my face and cannot sleep.

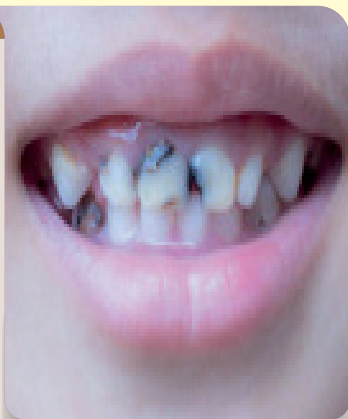
A. There are several causes of facial discomfort. The most prevalent cause, however, is acute pulpitis. The condition is caused by pulp inflammation (neuro-vascular tissue). It happens as a result of tooth decay spreading to the pulp tissue. In such circumstances, a dental procedure defined as pulpectomy is performed, after which the patient is referred to a dental specialist (endodontist) for completion of treatment.



2 AM

Q. I have severe throbbing pain in my lower teeth. It was filled temporarily a few months back. I failed to maintain my appointment to complete the Root Canal Treatment. What alternatives do I now have?

A. This is a regular issue we hear in the casualty department. When tooth decay reaches the nerve within the tooth, the patient may feel moderate to severe discomfort. Root Canal Treatment (RCT) is begun by the dentist by extracting the diseased nerve and temporarily filling the tooth. It is critical to proceed with and finish the RCT as soon as possible. When the RCT is finished, it is important to promptly restore it with a proper permanent filling. Delays in dental treatment will cause harm to the tooth and its supporting components. A temporarily restored tooth is extremely fragile and may break down beyond the possibility of restoration, in which case it would have to be extracted.



3 AM

Q. I have a 3-year-old son with many decayed teeth. He cannot sleep or eat anything.

A. Dental caries, often known as tooth decay, happens when sugary beverages and foods remain in your child's mouth for several hours. Bacteria on the teeth love sugar, so they utilize it to produce acid, which destroys your child's teeth. Your child's caries risk is increased by poor dental hygiene and frequent snacking. Grossly decayed teeth have to be extracted. Decayed milk teeth that can be retained, on the other hand, should be restored by a Pedodontist (Child Care dentist). Premature extraction of milk teeth would cause other teeth to shift into its place, causing problems during permanent tooth eruption.



4 AM

Q. I had my tooth extracted 5 days before. I still have severe pain and a foul smell in my mouth.

A) When the blood clot at the extraction site fails to develop or gets dislodged from the extraction site before the wound heals, it causes a painful condition called Dry Socket. Exposed bone and rotting food debris in the wound cause inflammation of the surrounding tissues. Failure to follow post extraction instructions given by the dentist is usually the most common cause. Smoking after extraction exponentially increases the risk of developing a Dry Socket. Dry sockets are treated by cleaning the extraction site, letting new blood into the socket followed by dressing to avoid infection. Antiseptic mouth rinses will help the patient and pain medications may be prescribed to keep them comfortable.



5 AM

Q. I had a wisdom tooth with cavities. I was advised to have it removed a few months ago, but I hesitated due to my fear of surgery. For the past few days, I can't swallow because of a stiff, painful swelling under my lower jaw. I'm also suffering from fever and chills.

A) Untreated decaying teeth will eventually cause inflammation and infection of the surrounding tissues. When the infection progresses and spreads through tissue compartments in the floor of the mouth, namely the submental, sublingual, submandibular spaces it can lead to a life threatening condition called Cellulitis or Ludwig's Angina. This is an emergency as it can lead to the obstruction of the airway passage thereby causing difficulty in breathing.

The patient should be admitted to the hospital right away. The initial objective should be to stabilize the airway. In addition, surgical incision and drainage are performed, as well as intensive antibiotic therapy coupled with appropriate hydration and nutritional support is provided to the patient.

In order to avoid such adverse complications, it is essential for patients to carry out the appropriate treatment and never neglect a decaying tooth, swelling inside the mouth or any region of the face and neck.

For nearly four decades, Amiri Dental Casualty Clinic has served the community 24 hours a day, seven days a week. Even during the pandemic, the dental casualty remained open to handle dental emergencies. The above question and answer section is an illustration of the vast range of patient concerns that we commonly see in our emergency room. The majority of these problems are avoidable. Good oral hygiene, proper diet, early identification and treatment of minor dental problems will prevent most dental complications. Following safety protocols during sports and driving are of utmost importance as they help prevent oral injuries.



Remember to brush
away your cavities,
floss away your bad breath
and smile beautifully with
all your teeth.