



Committed to Dental Excellence

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TOWARDS AEROSOL FREE DENTISTRY

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Decision to resume practice should be made based on which of the 3 Zones your practice is located in. Follow the most updated advisory from local governing authorities.

A dentist's life will never be the same post COVID-19. The serious implications on cross infection ensure that the use of the indispensable air turbine drills and ultrasonic devices that induce aerosol would be restricted. A large number of operative procedures entail the use of conventional high-speed drills and we would be lost without them. We cannot imagine a work life without the air turbine handpiece and ultra-son scalers, and getting back to our practices seems scary and confusing.

Air turbine drills were introduced into dentistry for the sole purpose of improving efficiency and reducing chairside time. Drilling through a tooth with an air turbine drill takes a fraction of the time taken by slow speed drills. There is a generation of dentists still practicing, who started their careers with a slow speed drill (author included). Most dental procedures that are practiced today with high-speed drills were practiced in the decades past with slower devices.

In order to tide us through the period of transition post lockdown, and until it is safe to go back to full-fledged air turbine tooth preparation, here is a set of recommendations that we suggest. These treatment modalities are without the use of an air turbine drills and hence non-aerosol procedures. The procedures will certainly benefit patients who are seeking dental treatment and help the dentist tide over the current crisis. These procedures are minimally invasive; they will also help in keeping options of performing conventional procedures after resumption to lockdown.

Most patients are aware of the potential dangers of undergoing dental treatment during the pandemic from information on media. Clinicians should strive to gain confidence of patients by ensuring that all safety measures are in place.

The aim of the treatment should be to

- 1. Minimize the creation of aerosol by eliminating the usage of aerosol producing devices like the air turbine drills and ultrasonic instruments in practice.**
- 2. Reduce chairside time and minimize 'doctor to patient' contact.**
- 3. Perform procedures that will work well in the **medium term** and allow for future improvement or upgradations**
- 4. Have a balanced approach towards satisfying patient's dental needs and looking after the well-being of the patient, doctor and support staff.**

Current infection control guidelines for prevention of transmission of disease specific to Covid-19 should be followed as advised by The Indian Dental Association (www.ida.org.in), Indian Endodontic Society(www.ies.org), Indian Prosthodontic Society(www.ips.online.in), American Dental Association(www.ada.org) or other recognized dental bodies. In this document, the authors wish to focus mainly on elective and emergency dental procedures that can be performed after following the necessary infection control protocols.

All procedures enlisted are to be performed using

- 1. Clinical micro motor and a contra angled handpiece with latch type burs without water or irrigation. This can reach a maximum speed of approximately 40,000 RPM.**

2. Electric driven motor and speed increasing handpiece (1:5) without water with friction grip burs. This device can reach a maximum speed of approximately 200,000 RPM.
3. Intermittent breaks should be given and small quantity of water in a syringe can be used to cool down the tooth surface. Excess water should be removed with a high vacuum suction. Rinsing and spitting should be prohibited.
4. The working position of the chair should be such that the clinician is operating from 11 o'clock or 12 o'clock position. This is done to avoid direct face-to-face contact with the patient. Use of magnification will help to maintain a safer distance from the patient while working.
5. It is advisable to reduce the air pressure on the three-way syringe to a minimum, so as to prevent any aerosol production while drying a tooth.
6. Use of Rubber dam for restorative and endodontic treatment is mandatory.

Procedures to be completely avoided are

1. Full coverage crowns needing extensive reduction of teeth
2. Crown and bridge restorations
3. Scaling with Ultrasonic devices

MANAGEMENT OF CARIOUS LESION NOT INVOLVING PULP

1. Posterior Lesions:

- Use a sharp spoon excavator to remove carious tissue.

- Remove all tissue from the perimeter of the lesion until you reach hard dentine. This will ensure a good chemical bond of the restorative material with the tooth and offer a hermetic seal.
- Remove only as much tissue from the floor as is required to allow adequate depth of the cavity so that a stable restoration of sufficient bulk can be placed.
- In situations where excavation with a spoon excavator is painful or difficult, use a slow speed micromotor handpiece and a carbide bur (*SS White Smart Bur or equivalent*).
- Place Glass Ionomer (GI) or Resin Modified Glass Ionomer Restorative Cement – RMGIC (*Fuji II LC- GC Corporation or equivalent*).
- Complete with a finishing bur on a slow speed drill if you have used RMGIC. If GI cement is used, coat the restoration with Vaseline. Finishing of the restoration to be undertaken in the next visit.

2. Anterior Restorations

- Remove carious tissue with a spoon excavator and place RMGIC.
- Composite resin restorations: Use of Self etch bonds are preferred in order to minimize the use of a three way syringe to wash off excess etchant prior to bonding. Refer to section on Esthetic Dentistry
- In toddlers and little children, do Non Restorative Cavity Control (NRCC) which involves arresting the carious lesion and postponing restorations as follows
 - Advise the parent to stop faulty feeding habits and diet high in sugar
 - Encouraging the parent to brush with 900/ 1000-ppm fluoride toothpaste irrespective of age

- Brush twice daily (rice grain size toothpaste up to 3 years; pea size toothpaste up to 6 years; above 1000 ppm for older than 6 years when available)
- Fluoride Varnish application every 3 months (*5% NaF – GC, Pulpdent, Ultradent, Voco or equivalent*)
- SDF can also be applied to arrest lesions when the change in colour is acceptable.

3. Ultra-conservative management of a carious lesion

- In young children and in the geriatric population, the carious lesion can be arrested with the application of Silver Diamine Fluoride –SDF (*e-SDF, Kids-e-dental LLP or equivalent*) – without removing any carious tissue. This will cause instant arrest of the carious lesion, remove all sensitivity but permanently discolour the carious tissue and change the colour - 'Black'. Colour change is of little or no consequence in posterior teeth. No further restoration is required after SDF application. However if food lodgment is a matter of concern, GI/ RMGI restorative material can be placed over the SDF treated carious dentine. This is called Silver Modified Atraumatic Restorative Technique (SMART)
- These evidence based minimally invasive procedures maybe continued in clinical situations even beyond the Covid-19 crisis. These procedures increase longevity of the tooth by preserving tooth structure, while preventing unnecessary pulp exposure.

MINIMALLY INVASIVE PULP THERAPY

Treatment under Rubber Dam isolation is Mandatory

1. Avoid pulpectomies in primary teeth. Extraction and placement of space maintainer where required are preferable.

2. In permanent anterior teeth with a traumatic injury and a pulp exposure.

- PARTIAL PULPOTOMY recommended if patient reports within a week and the exposure site is small (less than 4mm)
 - With a sterile spoon excavator, open up the exposure site so the excavator can enter the pulp Remove 2 -3mm of pulp tissue
 - Apply a pellet of Sodium Hypochlorite for one minute followed by a saline soaked, blot dried cotton pellet to arrest bleeding.
 - Place a layer of bioceramic calcium silicate cement (MTA/ Biodentine (*Septodont*) – latter preferable due to its limited ability to cause discolouration)
 - If not available, place a layer of Calcium Hydroxide
 - Place RMGIC layer.
 - Etch, bond and composite resin restoration OR reattach fragment if available
- FULL PULPOTOMY (CERVICAL PULPOTOMY)
 - This is performed when the patient presents to you later than a week or exposure site is large
 - Access opening with a micromotor handpiece
 - Remove the entire coronal pulp up to the root canal orifices

- Irrigate with 2.5 to 5% Sodium Hypochlorite
- Place a saline soaked, blot dried cotton pellet to arrest bleeding
- Avoid formation of a blood clot
- Place a layer of bioceramic calcium silicate cement (MTA/ Biodentine (*Septodont*) – latter preferable due to its limited ability to cause discolouration)
- If not available, place a layer of Calcium Hydroxide
- Place RMGIC layer.

3. In permanent incisors and molars when removal of carious tissue causes an iatrogenic pulp exposure the pulp is capable of repair

- a. Perform vital pulp therapy – FULL PULPOTOMY (as above)

4. In permanent teeth with a diagnosis of irreversible pulpitis with no radiographic findings of infection

- b. Perform FULL PULPOTOMY, unless the pulp is found to be necrotic after entering the pulp chamber.
- c. The remaining pulp will heal as long as haemorrhage is controlled, biocompatible, bioregenerative material is applied, and bacteria tight seal is present
- d. Follow steps in Pulpotomy. Irrigation with Sodium Hypochlorite is a must

5. When pulpotomies are performed in permanent teeth, the tooth may require reentry in future for root canal treatment, if signs and symptoms of pulpal necrosis appear

6. Root canal treatment should be initiated for teeth with necrotic pulp and the presence of a periapical lesion. Use a micromotor for access openings for full pulpectomies. Following the protocols of cleaning and shaping, a calcium hydroxide dressing is placed in the canals. The access and the carious lesion is restored with a RMGIC restoration in order to achieve coronal seal. Obturation can be performed after a few months. The objective of the therapy is to reduce symptoms, arrest the progression of disease and allow healing of periapical infection.

POST ENDODONTIC RESTORATIONS

Full crowns to be avoided since it will require the use of a high speed air turbine handpiece. The following two options can be chosen to protect the endodontically treated tooth and make it functional.

- Monoblocking with composite resin: Cuspal coverage of post endodontic teeth can be done using restorative composite resins in order to prevent fractures. The restorations can be done free hand or using a transparent silicone index. The teeth can be restored with conventional crowns or onlays in due course.
- Post & core restorations can be done following usual protocol.
- Stainless steel crown/ Hall technique: Badly mutilated molars can be restored with stainless steel crowns (for permanent dentition). These crowns require minimal tooth preparation which can be accomplished with micro motor drill. The crowns are durable and very retentive. They can be replaced by an esthetic restoration at a later date.

ORAL RADIOLOGY

Recommended: Extra Oral: the Chin Rest and rotary arms to be covered with disposable polythene covers and changed for every patient: 2 layer barriers: 1st layer in contact with patient to be removed by patient himself/ herself and 2nd layer by operator.

Intra Oral Options:

Films/ RVG sensors/ PSP's : 3 layers: Outermost cover removed by patient himself/ herself and disposed in designated waste receiver. 2nd layer removed by assistant, third layer removed by clinician and then the sensor is put in the machine.

ESTHETIC DENTISTRY

Treatment under Rubber Dam isolation is Mandatory

1. Prepless indirect veneers: Smile designing cases requiring mostly addition of restorative materials can be performed by doing minimal tooth preparation with a micromotor and diamond burs. Lab fabricated veneers with minimal thickness can be fabricated. Cases requiring significant tooth reduction for improving alignment

of teeth should be deferred. Impression and lab protocols can be followed as explained in section on removable prosthodontics.

2. Direct composite restorations: Class 4 restorations for repair of a chipped tooth can be performed following usual bonding protocols.
3. Diastema Closure: Since the procedure entails only addition of restorative material can be performed without any tooth preparation.
4. Multiple teeth build ups with composite resin. : Teeth that are worn off due to mechanical or chemical trauma can be reconstructed using light cured restorative composite resin by with special transparent indices made from a wax up. Injection moulding technique maybe employed for rapid build-ups of teeth. This can be considered as a medium term therapy and can be followed up at a later date with definitive indirect restorations if indicated.

PROSTHODONTICS

Procedures that can be performed:

1) Removable denture fabrication :

2) Fixed prosthodontics :

- No crown preparations to be done
- Fractured prosthesis can be removed using controlled force with crown remover under split dam technique
- Already prepared teeth: Either Bisacrylic chairside temps or lab fabricated heat cure or lab or chair-side milled acrylic crown which are precise fit, have more strength and needs lesser adjustments. Any adjustment

required should be made at slow speed in the adjacent room (other than the one in which patient is sitting) which is ventilated well.

- Already fabricated fixed prosthesis: has to be sterilized as described below and can be cemented using permanent cement if no occlusal adjustments required.
- Recementation of dislodged crowns/bridges
- Missing anterior tooth/teeth can be replaced a temporary Maryland bridge or Essix appliance.
- Missing posteriors: Removable denture to avoid occlusal plane discrepancy and to restore function.

Precautions to be taken:

- Impression trays: Avoid using plastic trays; Metal trays to be water rinsed, dried, packed and autoclaved before and after use; Customised light cure/self-cure tray fabricated in lab are best as they are discarded after use.
- Ultrasonic cleaners: washing under running tap water followed by judicious use of ultrasonic cleaners is recommended.
- Impression disinfection: Disinfectant should be compatible with the impression material. Immersion is better than spraying that increases risk for assistants. Impressions should be packed in two layers of airtight bags prior to dispatch. (the manufacturer's instructions to be referred and strictly followed)
- Alginate : to be disinfected using 1% sodium hypochlorite solution. Quaternary ammonium compounds, glutaraldehyde based; alcohol based.

- Elastomeric impressions : 1% Sodium hypochlorite solution, Quaternary ammonium compounds, glutaraldehyde based
- Wax rims and wax bites : disinfected using an sodium hypochlorite spray; "spray-wipe-spray" technique; wax bites can be enclosed in a sealed plastic bag for the proper contact time.
- Acrylic appliance disinfection: Povidone Iodine or 1% Sodium hypochlorite are preferred. Avoid storing prostheses in a disinfectant before insertion Instead rinse thoroughly after disinfection and store acrylic items in diluted mouthwash until inserted.
- Fixed prosthesis disinfection: Immersion in Cidex (alkaline glutaraldehyde) or 1% sodium hypochlorite.
- Gypsum casts: Difficult to disinfect. Microwave irradiation of the casts for 5 minutes at 900 W does give high level disinfection of the gypsum casts.

ADA recommends use of Chlorine compounds; Iodophors; Combination of synthetic phenols; Glutaraldehyde

Commercially available impression disinfectants:

1. Durr Dental: MD 520 impression disinfectant (alcohol free Quaternary ammonium compounds, glutaraldehyde based)
2. Zhermack: Zeta 7 spray (Alcohol based) and Zeta 7 solution (Quaternary Ammonium Salts, Phenoxyethanol based)
3. Septodont: Dimenol (alcohol and diamines)

Digital impressions are preferred in order to prevent spread of infection through cross contamination by making impressions and pouring casts.

BONDED RESTORATIONS FOR MISSING ANTERIOR TEETH

Treatment under Rubber Dam isolation is Mandatory

Conventional fixed partial dentures to be avoided since they require extensive tooth preparation that requires high-speed drill with copious amount of water coolant. Instead, bonded restorations should be considered for the replacement of missing anterior teeth including first premolars.

The following are types of lab made bonded bridges that can be fabricated with minimal or no tooth preparation.

1. Maryland bridge (with metal wings)
2. Fibre reinforced bridge (Composite resin and splinting fibres)
3. Lithium disilicate bonded bridge

Procedure:

- Minor preparation for gaining restorative space or improving path of insertion to be accomplished using diamond burs on a micromotor.
- Digital impression preferred over conventional impression.
- Conventional impression using elastomeric impression material.
- Opposing impression using Alginate

- Disinfection and dispatch of impression(ref to section on removable prosthodontics)
- Lab fabricated bonded bridges can be made entirely in Lithium disilicate or using Composite resin with resin reinforced splinting fibre or using metal wings and a bonded ceramic pontic.
- Bonding protocol for Lithium disilicate bridge: Rubber dam application. Wipe tooth surface using moist cotton. Use prophylaxis cups to clean surface. Protect adjacent teeth with Teflon tape. Etch for 30 sec. Gently wipe off etch with moist cotton. Wash off remaining gel with water in a 10 ml syringe. Use high vacuum suction to suck out all the water. Use suction to dry the tooth surface. Apply bonding agent. Very gently air dry. Etch wings of the restoration with Hydrofluoric acid. Wash off under running tap water for 30 seconds. Dry with air. Apply silane. Wait for a minute. Apply thin layer of bonding agent. Air dry with three way syringe (air pressure on three way syringe to be kept at a minimum to avoid splashing). Mix resin cement as per manufacturer's instructions. Apply on teeth surface to be bonded and on wings of the restoration. Seat restoration. Remove excess with micro brush. Tack cure. Remove excess with explorer. Cure completely. Check occlusion. Make fine adjustments. Finish and polish adjusted restoration and margins of restoration with silicone polishing burs.
- Maryland bridges with metal wings should be sand blasted in the lab and bonded using metal bonding agents.

PERIODONTICS

Ultrasonic scalers should be avoided.

1. SCALING: Only hand instruments to be used with intermittent rinsing with H₂O₂ or PVPT or CHX every 10 mins: remove only subgingival calculus and not stains

2. Surgeries: all periodontal surgeries are fine as long as there is no usage of power driven/ ultrasonic instruments:
Flaps, GTR, Root coverage/ FGG/ CTG

IMPLANT SURGERY

Implant surgeries should be postponed as far as possible. However, osteotomies for implant site preparation may be possible in select clinical situations. Experience and clinical judgment apart from thorough interpretation of CBCT data is mandatory for carrying out implant placement surgeries during this period.

Osteotomies in healed sites having good bone volume: Traditionally implant site preparations require drilling speeds of 500-2000rpm depending on the density of bone and the manufacturer's recommendations. Internal or external irrigation is advised for preventing heat generation during osteotomy preparation. However, implant site preparations can also be accomplished in select bone situations at speeds as low as 50-100 rpm without the use of saline for irrigation. Slow intermittent drilling using sharp set of drill and following the sequence suggested by the implant manufacturer is essential. It is prudent to choose implant sites that have lower bone density like D2,D3,D4 bone types.

1. Bone expansion: In cases with softer bone (D3,D4) and narrow ridges, bone expansion procedures can be accomplished using expansion screws or convex osteotomes. This may lead to thinning of the labial bony wall, which can be augmented by performing a GBR (Bone grafting) procedure.

2. Immediate placements: Most immediate implant placements do not require too much osteotomy site preparation. Apical preparation for achieving primary stability can be achieved using the same protocol explained above.
3. Indirect Sinus Lifts: Can be performed using concave osteotomes followed by bone augmentation.
4. Ridge augmentation and socket grafting procedures can be performed as always.

Mandatory:

1. CBCT
2. Achieve 100% hemostasis: No post op bleeding
3. Only medically non compromised and non-smokers
4. Preferably operate on those patients whom you had scheduled prior lockdown and know that they will give good history

Permissible:

Few drops of irrigation: least water flow on your physiodispenser for the pilot drill with heavy motor suction. Extreme care should be taken to prevent splatter.

Avoid:

1. Avoid mandibular anterior cases
2. Speed > 100 rpm: the smoke can cause aerosol even in absence of saline

3. No Piezo surgical devices
4. No autogenous grafting using trephine/ACM/piezo:
5. Complex surgical procedures

2nd stage: standard surgical protocol like periodontal surgery and oral surgery: should be fine: Only BLADE:
Avoid tissue Punch with motor/ No LASER

IMPLANT PROSTHETICS

Impressions for implant prosthetics can be carried out as always. For disinfection of impressions and dispatch to the laboratory, refer to section on removable prosthodontics.

ORAL SURGERY

1. Exodontia: Pre-operative use of a Hydrogen Peroxide mouthrinse. Scrubbing intraoral with Povidone Iodine. Local anesthesia as always. Extraction using fine tipped elevators and forceps. Sectioning to teeth to be done using high-speed micromotor handpieces with diamond or carbide drills without irrigation. Drilling should be intermittent with breaks for the patient to take a sip of cold water, which should be removed using a high vacuum suction. Patients should refrain from spitting or gargling during the procedure. Avoid irrigation with any external source to avoid splatter. Raising flaps and suturing, if needed, can be carried out as always. Pressure pack with a gauze and routine post extraction post op instructions. Patients advised strictly not to spit after the procedure. Patient should be given instructions for a safe method of gauze disposal.

2. Abscess drainages, opurclectomies can be performed as always.
3. Impacted teeth extractions requiring bone reduction should be deferred or referred to the specialist for further management. Experienced surgeons trained in the usage of chisel and mallet for the extractions of certain impacted third molars may consider treating such cases. Using drills for bone reduction with irrigation could lead to splatter and should be avoided.

ORTHODONTICS

Since orthodontic practice involves minimal aerosol generation except for some procedures, an orthodontic practice can be relatively lesser at risk for transmission of the corona virus. This would however, apply more to those practices that are pure orthodontic practices, without any general dentistry being practiced in the same setup.

The other consideration for an orthodontic practice is that almost all procedures are elective procedures and can be avoided, with even minor to moderate patient emergencies being taken care of by teleconsultation, prescribing ointments for local application and NSAID's for any required pain control.

Procedures that could be done

Orthodontic emergencies that would be needed to be seen would be mainly, broken attachments that are loose or hanging in the mouth, such as molar tubes or brackets, wire pricking or other orthodontic components causing abrasions or lacerations to the soft tissues, any other loose orthodontic appliances such as TPA's or CI.II fixed correctors, where there is a chance of ingestion.

The use of aligners as a treatment modality can be encouraged in Orthodontic offices as modern aligner techniques can bring about efficient tooth movement with more spaced out appointments, reduced chairside time and even minimum intra-oral treatments and almost negligible aerosol generation during the treatment.

Orthodontic procedures may be safely performed considering the following factors:

Minimise aerosol generating procedures

Minimise the number of appointments for each patient

Increase the time interval between appointments

Scope

1) Changing arch wires, ligatures or active components of the fixed appliance

Advisory: It must be performed with utmost caution and gentleness to avoid any fly away or laceration to patient/doctor.

Scope

2) Bonding of orthodontic attachments

Advisory: It should be modified such that polishing is performed using a rubber cup with low speed micromotor, followed by etching with usual procedure, wash off using a syringe and needle in slow manner to reduce splash of water, chip blower to gently air dry the surface and then follow usual bonding procedure. Extreme care to be taken to avoid splatter.

Scope

3) Interproximal enamel reduction (IPR)

Advisory: Only using IPR strips or oscillating saw. Very gently use water in a syringe to wash. Use high vacuum suction.

Scope

4) Cementation / removal of auxiliary appliances like TPA, Nance palatal button or RME

Advisory: Use chip blower gently to dry the tooth surface and hand scaler to remove the excess cement

Scope

5) Debonding of ceramic brackets

Advisory: It should be delayed by a few months; if urgently required, can be performed by using air rotor without water spray to remove any bracket remnant and then cleaning and polishing only using low speed micromotor. A subsequent polishing appointment can be scheduled later.

Scope

6) Placement of micro-implants and bone screws

Advisory: Use of three way jet should be avoided. To maintain field of vision, use moist gauze on the surgical site.

Scope

7) Adjustments of removable appliances like functionals, splints, aligners, and retainers

Advisory: should be brushed thoroughly by the patient and kept in the box just before entering the procedure room. Soak in diluted povidone iodine prior to adjustment.

DISCLAIMER

The views and opinions expressed in this document solely belong to the authors and the contributors. They are in no way binding on the clinicians to follow. The document has been published with the objective of helping the dental community to cope with the obligations of private practice during the ongoing COVID-19 crisis. Clinicians are advised to use their judgment and experience while treating individual clinical situations. Above all, the most updated rules and regulations of the local governing bodies should be respected.

FURTHER READING

1. *Indian Dental Association, COVID-19 Protocol, 2020* www.ida.org
2. *Guidelines on clinical management of COVID-19, Government of India. 2020.March17* [https://www.mohfw.gov.in/pdf/Guidelines on Clinical Management of COVID1912020.pdf](https://www.mohfw.gov.in/pdf/Guidelines%20on%20Clinical%20Management%20of%20COVID1912020.pdf) [accessed on 6th April, 2020]
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TREATMENT PROCEDURES	SCOPE	ADVISORY
Management of Carious lesions not involving pulp	<ol style="list-style-type: none"> 1. Selective caries removal 2. SDF application 3. SMART 	Using sharp excavators, slow speed drill and GIC/RMGIC restoration To arrest carious lesions in geriatric and pediatric patients SDF application to arrest lesion followed by GIC restoration
Minimally invasive pulp therapy	<ol style="list-style-type: none"> 1. Partial pulpotomies 2. Full pulpotomies 3. Root canal treatment 	Traumatic exposures, Iatrogenic exposures. Irreversible pulpitis, Traumatic and Iatrogenic exposures. Necrotic pulp; Periapical lesion. CaOH ₂ dressing; Delay obturation.
Post endodontic restorations	<ol style="list-style-type: none"> 1. Monoblocking 2. SS Crown 3. Preformed esthetic crown 	Bonded composite restoration with cuspal coverage For badly destroyed molars Long term esthetic provisional restorations
Bonded restorations for replacement of missing anterior teeth	<ol style="list-style-type: none"> 1. Maryland bridge 2. Fibre reinforced composite bridge 3. Lithium disilicate bonded bridge 	Metal wings, ceramic pontic Lab fabricated or chairside fabrication using restorative composite resin Lab fabricated for highly esthetic restorations
Prosthodontics	<ol style="list-style-type: none"> 1. Impressions 2. Removable dentures 3. Management of existing FPDs 	Chemical disinfection of impressions and wax rims Partial and Complete dentures, Essix appliances/Flippers. Cementation or bonding of restorations following usual protocol
Esthetic dentistry	<ol style="list-style-type: none"> 1. Direct composite veneers 2. Diastema closure 3. Class 4 build ups 4. Multiple teeth composite resin build ups(FMR) 	Free hand or using indices made from wax ups Free hand with palatal index Free hand with palatal index Transparent silicone index and injection moulding technique

Periodontics	1. Scaling 2. Periodontal surgery	Only hand instrumentation Following conventional protocols
Radiology	1. Panoramic xrays 2. IOPA 3. CBCT	Preferable 3 layers of disposable barriers Selected cases
Oral Surgery	1. Exodontia 2. Abscess drainage 3. Disimpactions	Sectioning with micromotor drills; fine tipped elevators Following conventional protocols Bone drilling to be avoided. Chisel/Mallet technique. Refer to specialist
Implant Dentistry	1. Implant placement surgery 2. Immediate placements 3. Crestal sinus lifts 4. Ridge expansion 5. Ridge augmentation	Slow speed drilling protocol without saline for soft bone. Dense bone cases to be avoided Atraumatic technique followed by slow speed osteotomy drills. Using concave osteotomes Bone expansion screws, convex osteotomes Following conventional protocols. No harvesting autogenous bone.
Orthodontics	1. Changing wires and ligatures 2. Bonding orthodontic attachments 3. Interproximal Reduction 4. Debonding 5. Placement of micro implants	Extreme caution to prevent laceration Wash etchant with water in syringe and gently use chip blower to dry Use IPR strips Delay debonding Avoid irrigation, use moist gauze to maintain field of vision

- Refer to complete document for detailed explanation of all procedures.
- All procedures are performed using micromotor and contra angled handpiece or electric motor with speed increasing handpiece without the use of water for cooling/irrigation
- Use of High vacuum suction
- Judicious use of rubber dam application for endodontic and restorative work
- Infection control guidelines to be followed as suggested by IDA, DCI, ADA and other recognized bodies.

Valuable inputs : Dr Mahesh Verma, Dr Vivek Hegde, Dr Sudhindra Kulkarni, Dr Ashok Karad,

Dr Ali Tunkiwalla, Dr Payal Rajender, Dr T V Narayan, Dr Mukul Padhye, Dr Ashok Dhoble, Dr Deepak Muchhala, Dr Sanjay Joshi

<https://www.ida.org.in/Home/Covid19Alert>

[Standing together in solidarity](#)

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