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COVID-19 Pandemic: Consensus guidelines for preferred practices in an aesthetic clinic

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Abstract

Strict infection control measures in response to the current COVID-19 pandemic are expected to remain for an extended period. In aesthetic clinics, most procedures are provided on one to one basis by the physician or therapist. In such a scenario, guidelines detailing the infection control measures for aesthetic clinics are of particular importance. An online meeting of an international group of experts in the field of aesthetic medicine, with experience in administration of an aesthetic clinic, was convened. The meeting aimed to provide a set of consensus guidelines to protect clinic staff and patients from SARS-CoV-2 infection. Consensus guidelines for “preferred practices” were provided for scheduling of patients, patient evaluation and triaging, and for safety precautions about the different procedures. Procedures were categorized into low-risk, moderate risk, and high-risk based on the likelihood of transmission of SARS-CoV-2 virus from the patient to the treating physician or therapist. While not intended to be complete or exhaustive, these guidelines provide sound infection control measures for aesthetic practices. Since guidelines regarding safety measures and use of PPEs may vary from country to country, the local guidelines should also be followed to prevent COVID-19 infection in aesthetic clinics.

KEYWORDS

aesthetic clinic, aesthetic medicine, aesthetic practice, consensus guidelines, coronavirus, COVID-19, pandemic

1 | INTRODUCTION

The current global pandemic of the SARS-CoV-2 virus that causes COVID-19 respiratory tract infection¹⁻³ is likely to last for a long time. Most of the countries have imposed lockdowns⁴ and introduced strict infection control measures. The reopening of society is likely to happen

slowly and in a phased manner while keeping a focus on the strict infection control measures in the times ahead.⁵ Appropriate precautions, up to date knowledge, and strict safety measures will be needed, not just when the lockdowns are eased in most countries,⁶ but also for the entire duration of the pandemic. There is a likelihood of patient overload during this period, and staying prepared is going to be the right strategy for this situation.⁷ The safety precautions need to be extended much beyond the lockdown period in every country. No laxity in these precautions should be allowed to happen even if the curve of COVID-19 cases flattens or falls near the baseline.

Abbreviations: HEPA, high efficiency particulate air; LHR, laser hair reduction; PPE, personal protective equipment; TOCC, travel, occupation, contact, cluster.

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While many medical practices are being run with online consultations,⁸ aesthetic clinics come in a category of medical services where most of the procedures are provided on one to one basis by a doctor/therapist. Many countries have decided to allow the opening of practices requiring one-on-one contact like dental, physiotherapy, aesthetics, provided they strictly follow the guidelines detailing the infection control measures.^{9,10} Aesthetic clinics across the world are uncertain about the safe reopening and running of their businesses and the safety measures needed to protect their staff and patients from COVID-19 infection. A set of consensus guidelines for “preferred practices” in aesthetic clinics is proposed in this article for maintaining a high level of safety for the patients coming to the clinic for treatment as well as for the doctors/therapists performing the procedures.

2 | REASONS FOR SAFETY GUIDELINES FOR AN AESTHETIC CLINIC

Multiple factors could lead to transmission of COVID-19 from a patient to the healthcare worker and vice versa, especially in an aesthetic clinic.

- Coughing or sneezing by patients and accompanying persons in the waiting areas.¹¹ Speaking loudly or deep breaths also generate aerosols.
- Small procedure rooms¹² with limited or no natural ventilation
- Central air conditioning having a single cooling unit and multiple room vents in most aesthetic clinics, without high efficiency particulate air (HEPA) filtration as present in most operating rooms¹³
- Inadequate distance between the patient and treating doctor or therapist¹⁴
- Some of the procedures could take a long time with a patient, for example, Full Face Ultherapy treatment, Whole body laser hair reduction
- Procedures generating aerosols/smoke like PRP microneedling treatment, crystal microdermabrasion, laser treatments¹⁵
- Repeated handling of equipment like touch screen, desktop, patient chairs by doctor/therapist and initial screening and handling of patient forms, cash, credit card by the front office staff

3 | CONSENSUS GROUP

The consensus group comprised of 10 experts in the field of aesthetic medicine (one plastic surgeon, four dermatologists, and five aesthetic physicians), having experience in the working and administration of an aesthetic clinic. The participating members of the consensus group were from India, United Kingdom, Philippines, Australia, Sweden, Norway, Switzerland, and South Africa. An online meeting of the consensus group members was held on April 27, 2020, using Zoom online app. Following items were proposed to all the participants, and a consensus was sought to establish the “preferred practices” guidelines during the meeting:

- 1 Guidelines for patient scheduling
- 2 Patient evaluation and triaging; patient categorization

- 3 Guidelines for risk categorization and safety precautions for the aesthetic procedures
- 4 Guidelines for staffing in the aesthetic clinics
- 5 Guidelines for general housekeeping in the aesthetic clinics

A “consensus reached” was considered when at least 70% of participants agreed on the points discussed.

4 | CONSENSUS GUIDELINES

The consensus group decided to provide guidelines on ways to reorganize the aesthetic practices while simultaneously instituting safety measures. The government and the health authorities in each country are likely to review the infection control strategy and measures regularly, and new updates may come in the future.¹⁶ Although cases of COVID-19 infection can happen despite strict measures, the infection is less likely to spread in aesthetic practices with the proposed infection prevention measures. Each aesthetic clinic must assess its business model and local conditions and accordingly adopt these guidelines into its daily functioning. In addition to the infection control measures listed in this article, the requirements and precautions advised by the public health authority of their respective country must be followed by the clinic.

4.1 | Consensus guidelines for scheduling of the patients

Patient scheduling is a critical step for the safety of patients, doctors, therapists, and clinic support staff. Sticking to the guidelines for “social distancing” will ensure safety for everyone present in the clinic. Advance Scheduling should be made compulsory and walk-in patients should be discouraged. The booking is to be done on the phone or online by the trained clinic staff. The time gap between the appointments can vary in different clinics as per the size of the waiting area/space between waiting chairs, the number of treatment rooms, the number of doctors and therapists to man the consultation/treatment rooms, type/duration of procedures and turnaround time of a patient from the time of arrival to time of exit.

The patient should be encouraged to visit the clinic alone or with only one attendant to avoid crowding in the clinic as carriers might be asymptomatic, and therefore, it would be wise to presume that every person walking in the clinic can be a potential source of infection. Most of the countries also have “contact tracing apps” which work on Bluetooth. Ensuring that the patients coming to the clinic have this app downloaded on their phone, and both internet connection and Bluetooth are switched on would make for effective use of this technology.¹⁷

4.2 | Consensus guidelines for patient evaluation and triaging; Patient categorization

The staff should be trained to take the necessary information on the phone at the time of giving an appointment. This information should

be rechecked when the patient arrives in the clinic. For unscheduled walk-ins, history taking becomes even more critical and must be done at the time of arrival. Temperature recording with handheld, non-contact thermometers can be used for screening. However, they could be impractical not only due to a shortage of locally available equipment, and patients taking paracetamol to bring down the fever before arrival but also for suspected COVID-19 patients who do not exhibit any fever.¹⁸

Experienced staff should be deputed to take the patient's history of travel, occupation, contact, and cluster (TOCC), and a declaration form along with a written informed consent document (Table 1) can be used to ascertain the following points.¹⁹

TABLE 1 Patient declaration and treatment consent form

Name and Address of the clinic
Name of the patient:
Age of the patient:
Name of spouse/partner:
Name of accompanying person/persons:
Present Residential Address:
Permanent Residential Address:
Occupation of the patient:
Occupation of the patient's partner:
History of travel in the last 15 days:
Date of leaving the home city:
Date of returning to the home city:
Places/countries visited in the last 15 days:
Places of transit during recent travel:
Any public event attended in the last 15 days:
Any history of contact with COVID19 case in the last 15 days:
Fever at present: yes/no
Tiredness at present: yes/no
Headache at present: yes/no
Cough at present: yes/no
Breathing difficulty at present: yes/no
GI symptoms at present: yes/no
Loss of sensation of smell: yes/no
Patient Declaration
I,, hereby declare that the information provided is complete and accurate. I fully understand that any false information can put the healthcare workers attending to me at a high risk of contracting COVID-19 disease. I fully agree to follow all the instructions regarding precautionary steps by Dr..... and the staff at the clinic.
I am visiting the clinic with full knowledge that we are going through a COVID-19 global pandemic. There is always a risk of contracting this virus when I am visiting a place during this pandemic. There is a possible risk of getting this virus by visiting any place during this pandemic. I have been fully explained the content of this declaration form in a language that I can understand.
I hereby absolve Dr and the team members of clinic/institution of any criminal or medicolegal liability arising due to my visit to the clinic. I hereby give my consent for this.
Patient's signature
Signature of the spouse/partner
Signature of the attendant
Signature of the witness
Date

T—Travel history including a detailed itinerary, transit locations, and date of return.

O—Occupation of the patient and spouse/partner to be asked to check if it is a high-risk profession.

C—A history of exposure to a test positive Covid-19 case should be asked.

C—A history of living in or visiting a known Covid-19 positive cluster.

After categorization of the patients based on TOCC history and presence or absence of signs/symptoms, only patients in Category A are to be taken up for an elective aesthetic procedure with due precautions, as shown in Figure 1.

4.3 | Consensus guidelines for risk categorization and safety precautions for aesthetic procedures

The procedures performed in an aesthetic clinic (office-practice) have been categorized by the expert panel as low-risk, moderate-risk, and high-risk based on the likelihood of transmission of the SARS-CoV-2 virus from the patient to the treating physician/therapist while performing the procedure. This categorization is based on the assumption that all the patients seen in the aesthetic clinic could be asymptomatic carriers until proven otherwise. This assumption has to be made until the time COVID-19 testing of all patients coming to the aesthetic clinics is done as part of the initial screening process.

The factors taken into account by consensus group for the risk categorization of the procedures were—the type of procedure (aerosol-generating procedure vs nonaerosol generating procedure), body part on which the procedure is being performed (face/body), and the duration of the procedure. Contact with mucosa/saliva, body secretions during the procedure, minimally invasive or noninvasive nature of the procedure, and ability of the patient to be masked or not were also considered as important factors for risk categorization (Table 2; Figure 2). The aerosol producing procedures have the highest risk,²⁰⁻²² and the long duration of a procedure also increases the risk due to longer contact time with the patient.²³ Similarly, procedures involving the middle and lower part of the face would not allow the patient to be masked at the time of the procedure, thus increasing the potential for transmission to the treating physician.²² Based on the categorization, guidelines for PPE were also given (Table 3).

The general guidelines for aesthetic procedures also included minimum conversations with the patient during the procedure, not allowing the patient attendant to be in the procedure room, and also avoid the helping staff/nurse to be in the procedure room while the procedure is being performed, if possible. Try to minimize the duration of the procedure where possible to reduce exposure time.²⁴ Cleaning of all surfaces (procedure chair/bed, inspection lights, instrument tray/trolley) and the apparatus being used with sterilizing solution should be done after each procedure.²⁵ For LHR, all the patients should be asked to shave at home and come for the procedure to reduce contact time with the staff. Lip injections with soft-tissue

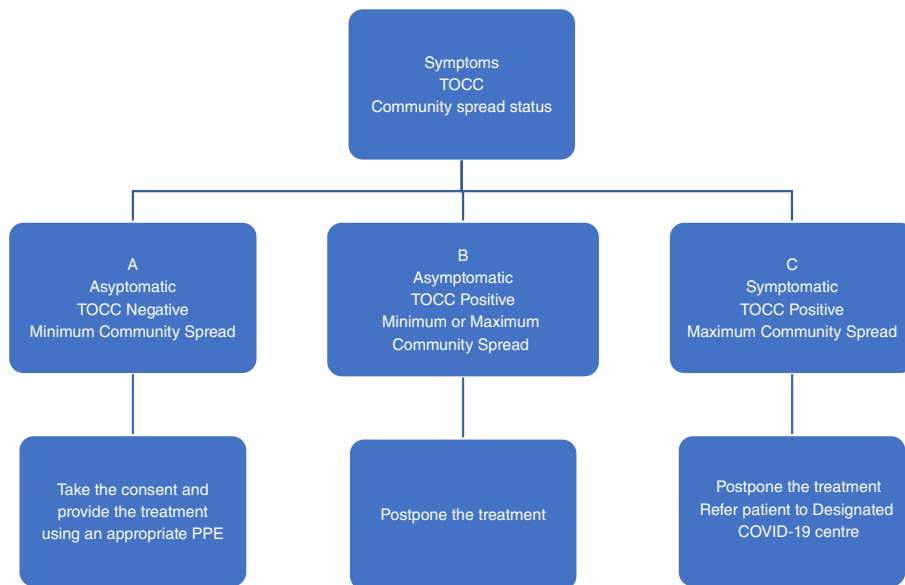


FIGURE 1 Categorization of the patients in three groups, based on the history and symptoms

TABLE 2 Risk categorization of various aesthetic procedures based on consensus guidelines

Low risk	Moderate risk	High risk
Injectables (botulinum toxin, dermal fillers) for upper third face and extra-facial sites Injection lipolysis on extra-facial sites Cryolipolysis on the body Nonablative fractional resurfacing lasers for extra-facial sites HIFU, extra-facial parts RF tightening for extra-facial areas PRP therapy for scalp, body areas LHR upper face and body areas with contact cooling device Low-level light therapy (LLLT) Chemical peels Body treatments with EMS devices IV injection therapy Sclerotherapy Hydrafacial	Injectables (botulinum toxin, dermal fillers) for middle and lower third face ^a Injection lipolysis on submental area ^a Cryolipolysis for double chin ^a Nonablative fractional resurfacing lasers for facial sites ^a HIFU, face ^a RF tightening for facial area ^a PRP therapy for face ^a LHR on the middle and lower face with contact cooling device ^a Microneedling procedures (with or without RF) on the face ^a and extra-facial sites Thread lifting on the face ^a and extra-facial sites Invasive RF devices for face ^a and extra-facial sites Soft-tissue fillers in the lips ^b Soft-tissue fillers/PRP in the genital areas ^b RF/lasers for genital area ^b	Aerosol-generating procedures (AGPs) or plume producing procedures such as Q-switched Nd:YAG, Asalexandrite, Ruby lasers, Pulsed-dye laser, ablative resurfacing lasers (fractional and nonfractional) LHR with noncontact cooling devices (generating plume) Electrofulguration, electrocautery Microdermabrasion Jet infusions/facials Dermajet devices Micropigmentation, microblading Body treatments with plasma devices

Abbreviations: AGP, aerosol generating procedure; EMS, electromagnetic muscle stimulation; HIFU, high intensity focused ultrasound; LHR, laser hair reduction; PRP, platelet-rich plasma; RF, radiofrequency.

^aThe site at which the procedure is being performed, especially mid and lower face, prohibits the use of a mask by the patient. Since social distancing can also not be maintained, it potentially increases the probability of transmission.

^bContact with oral mucosa/secretions and genital mucosa/secretions.

fillers would require that patients be asked to rinse the mouth with 1.5% hydrogen peroxide or 0.2% povidone-iodine for 1 min right before the procedure.²⁶

The high-risk procedures may be deferred for sometime after lockdown is lifted in the respective countries.²⁴ However, when the high-risk procedures are performed, certain procedure-specific steps will be required in addition to the recommendations provided for the moderate risk procedures. For example, when

aerosol-generating lasers are used, a cover with a transparent membrane such as polyvinyl clingfilm should be encouraged to reduce the splatter of the aerosolized cellular debris (like for tattoo removal with Q-switched lasers), keeping in mind the potential power loss when the laser passes through the membrane.²⁷ Additionally, one can use plume evacuation systems with filters that remove particulates up to 0.1 μm , known as a ULPA (ultra-low particulate air) filter.¹⁵

4.4 | Consensus guidelines for the staff rotation and training in the aesthetic clinics

The consensus was that the older staff members (>60 years) or those with associated comorbidities like diabetes, pulmonary conditions, cardiac conditions should be given leave or given work in areas with limited patient contact.²⁸ Staff can be posted for shorter working hours than usual and should be called in rotation.²⁹ At any given time, 33% to 50% of staff should be working at the clinic.³⁰ Staff must get training in donning and doffing of personal protective equipment and should be



FIGURE 2 An Aesthetic Practitioner performs an upper face botulinum toxin injection wearing a standard 3-ply surgical mask, eye protection, gloves, and a surgical cap. This is appropriate personal protective equipment as per the consensus recommendations for a “low-risk” procedure. In this instance, as the treatment area is the upper face, the patient is also able to wear a face mask (contributed by Wai Man Chan)

TABLE 3 Consensus guidelines for the use of PPEs in various aesthetic procedures, based on the risk categorization of the procedure

	Low risk	Moderate risk	High risk
Sterile, disposable gloves	Yes	Yes	Yes
Surgical cap	Yes	Yes	Yes
shoe cover	—	—	Yes
Eye protection	Yes	Yes	Yes
Face shield	—	—	Yes
3-ply surgical mask	Yes	—	—
N-95 masks	—	Yes	Yes
Plastic apron/fluid repellent gown	—	Preferred	Yes

provided with appropriate PPE.^{31,32} The staff should be encouraged to do frequent hand washing with soap and water for at least 20 seconds. In between, hands disinfectants can also be used. The staff should get training for phone booking, patient interviews on the phone, documentation of patient details and history, getting informed consent signed, social distancing, and hand hygiene³³ (Figure 3).

4.5 | Consensus guidelines for general housekeeping in the aesthetic clinics

The following guidelines apply to sanitation and logistics for aesthetic clinics.

- Physical barriers: Plastic/Acrylic windows panels or glass partitions, should be used if possible to reduce exposure of the staff to the COVID-19 virus. This could be done at the registration desk and the payment section of the clinic.³⁴
- Security desk: Security guards at the entrance should wear surgical masks and maintain a 2-hourly handwash protocol. The physical distance of at least 2 m should be maintained.³⁵
- Sanitizing stations: Special stations should be installed at clinic entrances, registration counters, and other high contact surfaces for hand sanitization (preferably contact-less; Figure 4). Shoe-covers should be available for clients at the clinic entrance so that they do not bring in the fomites with their shoe soles. Surgical masks and caps should also be provided at the entrance for clients who come in without wearing a mask.³⁶
- Seating arrangement: Chairs in the waiting area should be spaced about 2 m apart (Figure 5). In case of joined seating, distance seating could be maintained by strapping down alternate seats in the middle using ribbons or tape, making them unfit for use.³⁷
- Waiting area decongestion: Waiting area congestion can be avoided by scheduling appointments with appropriate turnaround time between two patients. The clients could also be asked to wait in their vehicles if they arrive before the appointed time or until the doctor is ready to see them.
- HVAC: Humidity and temperature control are usually maintained by a single unit, in most aesthetic clinics. In that case, it is recommended that it should be set to vent open mode. Maximum air changes



FIGURE 3 An aesthetic clinic receptionist wearing the recommended standard 3-ply surgical mask, is separated from patients by a transparent acrylic splash screen for additional protection. Hand sanitizer is available for regular and frequent use by the staff member before and after any physical interaction with patients. Contactless payment by card is the preferred transaction method. (contributed by Phillippe Snozzi)



FIGURE 4 Easily accessible hand sanitizer is placed at the entrance to an aesthetic clinic, along with clear signage (both written and visual) instructing patients to disinfect their hands before entry and after leaving the clinic. Automatic doors in this clinic allow for contactless entry. Where this is not possible, it is preferable for an entrance door to be secured in the open position to avoid unnecessary contact with door handles. (contributed by Wai Man Chan)



FIGURE 5 A waiting area within an aesthetic clinic, where seats are placed 2 m apart to maintain social distancing. Local regulations may stipulate the total number of occupants per m². All loose items such as magazines and information leaflets have been removed to reduce the risk of asymptomatic viral spread through shared contact. (contributed by Wai Man Chan)

possible should be facilitated, depending on the design of the clinic. A fan may be placed to change the direction of the flow of air away from the treating physician/therapist.³⁸ Hospitals/clinics may look into adding HEPA filters at more places in their existing HVAC systems. A low-cost air purifier with a HEPA filter can cost approx. \$100 and circulates the air in a 155 sq. ft room five times per hour, and these could be deployed widely in hospital/clinic environments.³⁹

- Non-essential material: Care must be taken to remove all non-essential material like brochures, magazines, and newspapers from the offices and waiting rooms, as these could be a potential source of contamination. The staff should be trained to use electronic modes of information sharing like e-mail, air-drop, and WhatsApp. Likewise, all decoration items like artificial flowers or other things that cannot be regularly cleaned should not be in any area of the clinic.
- Cleaning guidelines:
 - PPE for cleaning staff: Cleaning staff must wear surgical masks, shoe covers, gloves, and protective eye covering. They should be well trained in hand hygiene protocols.⁴⁰
 - Mopping of floors: Entrance lobbies, elevators, staircases, corridors, consulting offices, counseling rooms, procedure rooms, and pantries should be mopped thoroughly with 1% sodium hypochlorite solution or phenolic disinfectants.⁴¹ The cleaning process should start from cleaner areas and then move to dirtier areas. Most alcohol-based solutions like isopropanol or ethanol, also significantly reduced viral titers.⁴²
 - Cleaning of frequently touched areas: Surfaces like reception countertops, tabletops, chairs, mouse, mousepads, keyboard, office files, registers, pens, tea/coffee dispensing machines, filing cabinets, card swipe machines and telephones should be thoroughly cleaned.⁴³ These can be cleaned with either a 1% sodium hypochlorite solution (can be corrosive for certain surfaces) or a 60% to 70% alcohol-based sanitizer.⁴⁴

- Metallic surfaces: Since the virus can survive for days on metallic surfaces like taps, flush handles, doorknobs, door handles, and handrails, these should be cleaned with a 60% to 70% alcohol-based sanitizer three to four times a day.⁴⁵ For cleaning and sterilization of hand pieces of various equipment like laser, cryolipolysis, and so on, guidelines should be sought from manufacturer to avoid damage to the equipment.
- Wiping vs spray: Sanitisation of potential high contamination areas like registration counters should preferably be done by wiping down the surfaces with a disinfectant. The use of sprays using spray bottles should be avoided as that could generate aerosols in the process because of pressure applied.⁴⁶
- Toilets: Toilet floors, sinks, toilet seats, and soap dispensers should be cleaned with 1% sodium hypochlorite or a phenolic detergent three to four times a day. Users should be instructed to flush the toilets using a tissue paper to hold the handles. Also, the toilet should be flushed while the seats are covered by the lid to prevent any aerosolization.⁴⁷
- Outdoor areas: Outdoor areas of the clinic would need less intense disinfection by being exposed to sunlight and air currents. However, cleaning and disinfection of frequently touched surfaces should be carried out here as well.
- Patient examination tables or procedure chairs: These should preferably be covered with disposable sheets, which must be discarded after each use.⁴⁸ In case disposable sheets are not available, cotton sheets could be used and machine-washed with a regular detergent after every use. Mattresses and edges of the tables and examination/procedure chairs must be sanitized using a 60% to 70% alcohol-based sanitizer. If that is not available, then a 1% sodium hypochlorite solution could be used.
- Cleaning schedules: cleaning schedules should be developed, with the frequency of cleaning showing if surfaces are high-touch/low-touch, the type of activity taking place, and the infection risk associated with it and the probability of contamination.⁴⁰
- Waste bins: no-touch waste bins in each procedure room, office, waiting area, and restrooms should be lined with disposable liners.
- Laundry handling: management of laundry should be done by trained staff. Gloves and masks should be worn during the handling of laundry before inserting it into the washing machine. Clean laundry should be handled with gloves.
- Food/beverages and pantry: pantry utensils for the staff should be disposable. Clients should be encouraged to carry their water bottles with them. The practice of serving tea, coffee, and other beverages should be discouraged. Pantry area should be disinfected every 2 hours, and items like tea kettle handles and external surfaces should be disinfected after each use.

5 | CONCLUSIONS

During COVID-19 pandemic, strict patient screening, social distancing, use of PPEs, and taking extra precaution during “high risk” aesthetic procedures can help in keeping patients as well the clinic staff safe

from COVID-19 infection. The patients with minimum risk of transmitting COVID-19, based on the risk categorization, can be taken for elective aesthetic procedures. Appropriate use of PPEs and other precautions can be taken by treating clinic staff as per the risk category of the aesthetic procedure. The “preferred practices” suggested by the consensus group provide the basis for sound infection control for aesthetic clinics, though these may not be complete or exhaustive. In addition to the consensus guidelines, those provided by the health authorities in each country should also be followed.

DISCLAIMER

The guidelines by consensus group are for guidance only and are not compulsory protocols. Each aesthetic clinic can have a modified protocol based on the local conditions and respective government guidelines for enhanced protection against novel Coronavirus infection. The guidelines regarding safety measures and use of PPEs vary from country to country, and the local guidelines should be followed wherever available. The aesthetic clinic also has a right to remain closed for safety reasons till the time the government does not enforce it to open under local laws.

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