

Dermatosurgery Practice and Implications of COVID-19 Pandemic: Recommendations by IADVL SIG Dermatosurgery (IADVL Academy)

Dermatosurgery practice recommendations are framed to enlist possible actions that one can take to protect dermatologists, patients, and healthcare workers during the evolving COVID-19 (Coronavirus disease) pandemic caused by Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2). These are based on recommendations from Ministry of Health and Family Welfare, Government of India,^[1] Centre for Disease Control and Prevention (CDC),^[2] and World Health Organization (WHO).^[3] The recommendations reflect the current status, but are likely to undergo future development or revisions in light of the rapidly evolving COVID-19 pandemic and ongoing research. Readers relying on the information in this document should also bear the responsibility of being aware of and complying with updated state or national rules and recommendations applicable to them. These are recommendations for general purpose for dermatologists practicing dermatosurgery but cannot be used for medicolegal purpose.

General recommendation for facilities running dermatosurgery services

1. All nonessential/ nonemergent/ elective dermatosurgery procedures should be re-scheduled in view of recommendations^[4] and nation-wide lockdown, as and when announced by the Government of India or respective State Governments. Consider nonsurgical management wherever appropriate.^[5]
2. Telemedicine services could be offered, depending on the recommendations issued separately, irrespective of the COVID-19 infective status of the patients. This will minimize the spread of infection.^[6,7]

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3. Prior to patient arrival, assessment/ triage should be done regarding the need for the visit. Questions regarding travel history of the patient (or accompanying person, if allowed), status of co-morbidities including diabetes, hypertension, chronic lung disease, chronic smoking, age >60 years, history of being on immunosuppressive therapy, etc., should be assessed. Assess the acuity of the need for consultation.
4. On the day of arrival of the patient, re-assess the need for consultation, check for fever or any signs and symptoms of respiratory infections, history of contact with any COVID-19 patient. If any of these are positive, it is better to refer the patient to a physician for evaluation and reschedule the appointment.^[8]
5. According to the CDC, diluted household bleach (sodium hypochlorite) solution, alcohol solutions (containing at least 60% ethyl alcohol), and most EPA-registered (United States Environment Protection Agency) common household disinfectants could be effective for disinfecting surfaces against the coronavirus.^[2,9] WHO recommends the use of 60% Ethyl alcohol or 70% isopropyl alcohol for smaller areas and small examination instruments like lens or torch; and sodium hypochlorite 0.5% for floors and larger areas like chairs, counter tops and table tops.
6. To prepare 0.5% sodium hypochlorite (strong) solution mix 1 part of 5% bleach with 9 parts of water to prepare the desired amount.^[10] This is to be done after wearing extended personal protective equipment (PPE) and needs to be prepared daily.^[10] The

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- solution should be stored in a bucket closed with lid, and leftovers should be discarded at the end of the day.
7. Wipe or spray the high touch surfaces like tabletops, examination tables, handles and door knobs, examination lamp handles, hard-backed chairs, light switches, phones, keyboards, sinks, and basins, etc.
 8. Remove reading materials like papers, magazines or drinking water dispensers from the waiting area. These can be potential fomites. Remove phone charging ports, tablets/touch-screens, or remote controls, if available in waiting areas.
 9. Door handles need to be periodically sanitized by the designated staff. The doors may be left open whenever possible to avoid a possible contact on the door handles
 10. Staff should be advised not to use finger touch biometric systems for marking attendance, if applicable.
 11. The doctors and staff should be discouraged from using wrist watches, rings, bangles, and sacred threads (around wrists) as they are likely to be potential fomites by providing safe haven to the virus. They are also hindrances in hand washing or sanitisation, which needs to be done repeatedly and at a higher frequency.
 12. Posters/instructions emphasizing respiratory hygiene, cough etiquette, and hand hygiene should be adequately displayed in clinic. These posters (even videos) should be displayed in English, Hindi, and local languages and should have adequate pictures to explain the steps. Such materials are readily available from WHO website^[11] and Government of India.^[1]
 13. Display “No-Spitting” signages prominently in local languages in the clinic and premises.
 14. Use of hand sanitizer and wet wipes (60-90% alcohol based) should be ensured and they should be made available at the entry, in the waiting area, washrooms and examination rooms. It would be advisable to assign staff, if possible, to ensure that all people who walk into the clinic are following this directive religiously.
 15. Encourage telemedicine.^[6,7]
- them out and allow only limited number of people inside. These measures will make the waiting room spacious. Social distancing should be maintained all time.
5. If any patient with symptoms or possible COVID-19 exposure needs to be seen, use droplet precautions.^[13] In addition to wearing a mask, a face screen, protective suit, etc., may be used. The patient should also be wearing/provided with face mask.
 6. Minimize the need for in-person follow-up visits for a patient.
 7. Patient declaration form (in English/local language) can be read, understood, and signed by the patient, (in duplicate) regarding the potential spread of COVID-19 due to the visit to the health facility. This is, if applicable, as per the State government rules.

Procedure to be followed during and between patient consultations

1. Do not shake hands with patients or hug them. Use other methods of social greeting like bow, Namaste, etc., Practice social distancing at all times.^[13]
2. Change gloves/wash hands/sanitize hands, in between patients, especially if the patient has been touched.
3. Avoid touching your face/nose/eyes.^[13]
4. Cancel appointments and stay at home when you are sick. Reschedule appointments with another dermatologist if possible.
5. Cover your cough or sneeze with a tissue, then throw the tissue in a closed bin.
6. Clean and disinfect frequently touched objects and surfaces using a regular household cleaning spray/sodium hypochlorite (0.5%) wipes.

Precautions during dermatosurgery

The goal should be to provide timely surgical care to patients presenting with emergent conditions requiring dermatosurgical intervention; while at the same time, optimizing patient care resources (availability of health care staff, personal protective equipment, gloves, masks, etc.), preserving the health of caregivers and breaking the chain of transmission. A retrospective cohort analysis of 34 patients undergoing elective surgery during the incubation period of COVID-19, showed poor surgical outcomes. All the patient developed COVID-19 pneumonia shortly after surgery with 15 (44.1%) of them needing ICU care, and 20.5% overall mortality.^[14] Such adverse outcomes underline the need for postponing elective surgical work.

A triage of patients requiring surgical intervention has been recommended. On the basis of clinical judgement, various levels of urgency need to be assigned to patient needs. At

For patients who need consultation

1. Suggest the patient to arrive alone. In case an attendant will be required, ensure only one attendant, to avoid over-crowding in the waiting area.^[12] Patients should be scheduled accordingly.
2. Everyone entering the clinic should use hand-sanitizer at arrival. Each of them should be wearing face masks before entering, covering the nose and mouth.
3. Fix appointments in a manner that patient/s should not wait in the waiting room.
4. Reduce the number of chairs in waiting room to discourage over-crowding. At least 1 m distance is advised.^[13] Space

the same time, the numbers of COVID-19 patients requiring care is expected to escalate; hence surgical patients should be limited to those requiring urgent biopsy, suspected malignancy, or acute and unbearable symptoms needing urgent care. All other surgical procedures should be delayed until after the peak of the pandemic is seen.^[4] Emergent conditions which may require the services of a dermatosurgeon are included in (though not limited to) Table 1.

Pre-surgery

1. Avoid doing chemical peels, laser toning, laser hair removal, hair transplant, and lasers for pigmented and vascular lesions. These are nonessential services that should be withheld.^[5]
2. Avoid all elective or cosmetic surgeries, as most procedures are on upper half of body and likelihood of inhalation of infective droplets are higher.
3. In a COVID-19 patient or suspected patient, nonoperative management is preferred.
4. Preoperative surgical consent discussion with the patient must cover the risk of COVID-19 exposure and its potential consequences.^[4]
5. If possible, preoperative assessment of surgical patients should ideally include COVID-19 testing.^[4] Limited availability and stringent criteria for testing may not allow it at the present time.
6. Ideally, the operating rooms should be appropriately filtered and ventilated. If possible, room for suspected COVID-19 patients should be different from those for other emergent surgical patients. If possible, negative pressure rooms are considered ideal.^[4]
7. In case different rooms are not possible, the suspected or confirmed COVID-19 patient should be taken up last in the list, if possible. It would be easier to close down the theatre after this and disinfect it thoroughly.

During Surgery

1. Only essential and minimal staff should be allowed to participate in the surgery. Avoid any exchange of operating room staff.

Table 1: Emergent conditions which may require dermatosurgical intervention

Surgical procedure	Indications
Skin biopsy/mucosal biopsy	For suspected malignancy, bullous disorders, vasculitis, etc.
Incision and drainage	Cyst/abscess
Acute paronychia abscess	Nail saver and pain relief
Ingrown nail	Heifitz stage 2 and above
Cutaneous viral infections like verruca and molluscum	Delay may cause exponential spread
Clavus excision	Pain relief
Excision of tumors	For example, glomus tumor or other painful tumors
Excision of BCC/Atypical Nevi	To avoid delay in diagnosis or management

2. All participating healthcare workers should use PPE as recommended by national or international organizations. The use of PPE as per risk of exposure should be uniform in all surgical procedures regardless of the COVID-19 status (known, suspected, not suspected). The removal and disposal of PPE should be proper. PPE inside operating theatre includes respirator (N95 or FFP2 standard, or equivalent), gown, gloves, eye protection, and apron.^[15,16]
3. For procedures like skin biopsy, incision and drainage, excision, ingrown nail etc., use disposable instruments (like disposable punches) as far as possible.
4. Use absorbable sutures wherever possible. This will reduce follow-up visits.
5. Electro-cautery, and laser ablation procedures can produce aerosols;^[4] hence, droplet precautions need to be taken. Use the machines at lower settings.
6. Operating under magnification will help ensure adequate distance from the patient.

Post-surgery

7. Use absorbent, water impermeable, or semi impermeable dressing which require infrequent change.
8. Prescribe long term postoperative medications, again to minimize visits.
9. Surgical equipment used for known COVID-19 positive or those under investigation should be cleaned separately from other surgical equipment. These can be disinfected with 0.1% sodium hypochlorite or 60-70% ethanol, which significantly reduce viral count on surfaces within 1 min exposure time, as these are effective against human coronaviruses.^[17] Thereafter routine autoclaving can be done.
10. SARS-CoV-2 is stable for hours on surfaces such as metal, glass or plastic for as long as 5 days,^[18] even reported upto 9 days.^[17] Hence, the dermatosurgery operation theatre including equipment, will need thorough cleaning (as described above) in between patients.
11. Coronaviruses do not remain active at temperatures higher than 86°F (30°C), the same may be applicable for SARS-CoV-2. Hence standard autoclaving procedures to be followed.^[19] Guidelines do not mention specifics regarding sterilization of surgical instruments for SARS-CoV-2; thus, sterilization practices utilising Central Sterile Services Department (CSSD) and Standard Precautions should be routinely followed.^[20]

The recommendations for practice in various specialties of medicine are evolving as we understand the contagion more effectively. The need for constantly updating in view of emerging evidence remains. Some recommendations may appear overarching at present, but one must be aware that number of COVID-19 cases are predicted to grow exponentially in the coming weeks and months. Hence, we need to be prepared to safeguard our staff, facilities, and

patients, while providing dermatosurgery care to those who truly require them.

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Conflicts of interest

There are no conflicts of interest.

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