Be Motivated

Recommendations on best Surgical Practices during Covid-19



Introduction Surgical Best Practices

As we find ourselves in the midst of a global crisis from the novel coronavirus pandemic, and with multiple global reports of a high mortality rates amongst both patient and healthcare workers, relaunching surgical practices during unprecedented times can be daunting for all. Therefore, we have generated a step-by-step suggestive guide (based on global recommendations) to help you return to practice whilst also maintaining safe surgery and promoting high quality patient care.

Topics covered:

- Returning to practice
- Preoperative considerations
- Intraoperative considerations

Guidelines surrounding Covid-19 are constantly changing, updates can be found on our social media pages.



Best Surgical Practices: Returning to Practice

Deciding when to return to practice following COVID-19 depends on your geographical location and local government recommendations. In order to promote safe surgery and reduce the risk of transmitting COVID-19, it has been suggested to consider the following before returning to practice:



Reduction of new COVID-19 cases:

Sustained reduction of new COVID-19 cases within your region for at least 14 days before returning to practice.



Local hospital capacity:

Check with your local hospital regarding bed capacities and available facilities to reduce the strain on nearby health services.





Prioritising elective cases:

Reduce the risk of overwhelming hospital resources and intensive care facilities by avoiding high risk and long surgeries and cancelling all major operations where possible.

High risk patients include:

- Immunocompromised
- Bariatric patients and patients with a BMI >30
- Elderly patients
- Patients with comorbidities such as heart disease, type 2 diabetes and respiratory diseases
- Smokers

Preoperative Considerations

While practice before the global pandemic included preoperative checks upon admission, stricter safety procedures are required to ensure a reduced risk of exposure and virus transmission.

Preoperative safety procedures include:



COVID-19 consent form:

Newly adapted COVID-19 consent forms should be signed by patients prior to the surgical intervention. These forms can be obtained from your local governing body or surgical society.

Patient surgical kit:

Provide patients with a plastic bag to store their clothes during surgery and a surgical kit to wear during the procedure. This includes a surgical hat, mask, gloves, disposable gown and foot protection.

Pre-operative marking:



Don appropriate personal protective equipment (PPE) when undertaking patient marking for surgery. PPE includes: surgical hat, surgical masks, disposable apron and non sterile disposable gloves.

Pre-operative Considerations *Continued*

Testing before surgery: All patients should be tested for COVID-19, 24-48 hours prior to admission and the day of surgery.

This testing includes: temperature check with a non-touch thermometer, active COVID-19 symptom checks and background check of which may include detailed recollections of any recent exposures to a person with active symptoms. All COVID-19 positive patients should be rescheduled until completion of isolation period and confirmed negative tests.

Has he patient experience or been exposed to nyone with active symptoms







FEVER

PERSISTENT DRY COUGH

TIREDNESS / FATIGUE

Others



SHORTNESS

OF BREATH





HEADACHES



LOSS OF SMELL / TASTE

CHEST PAIN

CHEST PAIN

NAUSEA / VOMITING AND DIARRHEA

Intra-operative Considerations

Standard universal precautions is not an unfamiliar phase in the operating room and although we have been implementing safety precautions since the beginning of our practice, the risks associated with the novel coronavirus means we have to promote further vigilance into our practice. *This includes considerations in the following:*



Patient draping:

During the procedure, place a plastic drape or plexiglass screen under and over the patient's head and chest to isolate the airway and minimize exposure of respiratory pathogens.

Theatre ventilation:



Ensure adequate operating room ventilation and laminar flow between surgical cases. It is recommended to wait several air changes between surgical cases.



Theatre etiquette:

Reduced theatre personal and theatre traffic will reduce the risk of transferring airborne contaminated partials, particularly during aerosol generating procedures (AGP).



Aerosol generating procedures (AGP) are high risk of transmitting respiratory pathogens and therefore to minimise the risk considerations must be during:

This includes :

General anaesthesia& extubating):Only anaesthesia staff sl

• Only anaesthesia staff should be present until, at least, 20 minutes after intubation and extubating

(durina

intubation

- Anaesthetic staff should don full personal protective equipment (PPE)
- Use a plexiglass screen or plastic sheeting to isolate the patient's airway



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Electrosurgical equipment: During wound irrigation, if possible, use sterile plastic shields and closed suction systems.



Wound irrigation: If possible during wound irrigation, use sterile plastic shields and closed suction systems.



Patient warming devices:





Contaminated equipment: :

Place contaminated anaesthetic equipment and surgical instruments in a sealed bag prior to transportation to the sterilization department.

Hand hygiene:

Preform careful hand hygiene upon entering and existing the operating theatre, before donning and after donning PPE and after patient contact.

Theatre cleaning:

Preform deep cleaning procedures after each surgical procedure in accordance with local infection and control policies and procedures.

Personal Protective Equipment During Surgical Procedures

Although personal protective equipment (PPE) is not unfamiliar in the operating room, practices around the use of this equipment in theatre have changed due to COVID-19.

This includes:



PPE with non-aerosol generating procedures:

- Disposable gloves
- Disposable plastic apron
- Disposable fluid-resistant gown risk assess
- Fluid resistant mask (type IIR) single or sessional use
- Eye/face protection



PPE with aerosol generating procedures:

- Disposable gloves
- Disposable fluid repellent gown
- FFP3/ P2/ N95 respirator or equivalent
- Eye/face protection

Using Personal Protective Equipment During Surgical Procedures

To minimize contamination and airbone transmission of COVID-19 in the operating room, it is paramount to familiarize yourself with donning and doffing procedures of personal protective equipment (PPE) and ensure you have been fit tested for an appropriate respirator (P2/N95, FFP or equivalent).

This is undertaken outside the patient's room.

Pre-donning instructions

Ensure healthcare worker hydrated

Tie hair back

Remove jewellery

Check PPE in the correct size is available



1 Put on the long-sleeved fluid repellent disposable gown



2 Respirator Perform a fit check



3 Eye protection



4 Gloves

During the removal of personal protective equipment (PPE), the risk of potential contamination of infectious contaminants is at the highest. Although there are a variety of ways to safely remove PPE without increasing the risk of transmitting infectious contaminants, it is important to remember all PPE except the respirator should be removed before exiting the operating theatre.



1 Gloves-the outsides of the gloves are contaminated Firstly

Grasp the outside of the glove with the opposite gloved hand; peel off Hold the removed glove in gloved hand

Then

Slide the fingers of the un-gloved hand under the remaining glove at the wirst Peel the remaining glove off over the first glove and discard Clean hands with alcohol gel



2 Gown-the front of the gown and sleeves will be contaminated

Unfasten neck then waist ties

Pull gown away frin the neck and shoulders, touching the inside of the gown only using a peeling motion as the outside of the gown will be contaminated

Turn the goen inside out, fold or roll into a bundle and discard into a lined waste bin



3 Eye protection (preferably a full-face visor)-the outside will be contaminated

To remove, use bothhandle to handle the retraining straps by pulling away from behaind and discard



In the absence an anteroom/lobby remove FFP3 respotators in a safe area (e.g. outside the isolation room). Clean hands with alcohol hand rub.

Do not touch the front of the respirayor as it will be contaminated

Learn forward slightly

Reach to the back of the head with both hands to find the bottom retaining strap and bring it up to the top

Lift straps over the top of the head

Let the respirator fal away from your face and place in bin

5 Wash hands with soap and water



Our philosophy has always been to remain committed to safety, innovation and patient centricity. Healthcare is constantly changing, as we have seen in the recent unprecedented times of COVID-19. At Motiva[®] we strive to help you combat the 21st century healthcare and the unfamiliar times of COVID-19, together. Motiva[®] next generation products and services aim to help you to adapt to the new world of health care and provide safe surgery to your patients.

Optimal safety profiles:

- >1%
- seroma and double capsule)
- \bullet No cases of BIA-ALCL to date
- Impressive 0.36% overall reoperation rate

• Less than 1% complication rate (capsular contracture, rupture, late





• Less inflammation

• Less bacterial adhesion and biofilm formation

• Less fibrotic encapsulation

Promoting Safe Surgery with Motiva® Products and Services During COVID-19

Considerable concern has been raised over the dissemination of infectious particles during surgical intervention, which pose significant risk to both patients and healthcare workers particularly during aerosol generating procedures. Therefore, it has been globally suggested to utilise single use disposable devices and closed irrigation systems during surgical intervention to reduce the risk of cross contamination. Motiva® offers a complete range of disposable surgical instruments to help you undertake safer surgery and reduce the risk to both you and your patients, full information on available products can be found at Motiva.health

Extensive clinical research and scientific evidence:

- Strong body of supportive evidence
- Positive clinical outcomes
- Ongoing clinical trial, research and developments
- Up to date post market surveillance data



Comprehensive Product portfolio and designed surgeries:

- To meet the unique needs of every individual women
- Ability to differentiate your practice offerings

3D Consultations:

- Promotes non touch technique during patient measurements.
- Precise surgical mapping of patients anatomy.

Single-use devices available:



Light retractor with integrated smoke evacuation channel:

Designed to reduce cross contamination and the removal of potential infectious partials in surgical smoke during electrosurgery.

Internal sizers:



Single use disposable internal sizers aid in the reduction in risk of cross contamination during breast surgery procedures.



Motivalmagine[®] Insertion Sleeve:

Effectively provides a shell-tissue interface designed to reduce fiction and cross contamination during implant insertion.

Single-use devices:

PureGraft[®]:

A closed fat grating system maintains all tissue within the circuit, thus promoting high quality fat and additionally reduces the risks of spreading contaminants during fat grafting procedures.



Designed for safe harvesting and fat grafting during breast surgery. The unique characteristics of the bulb protects the breast implant integrity during fat grafting procedures. While the single use element allows for easy disposal reducing the risk of patient to patient cross infection.





Overall complication rates of less than 1% reported through 8 years of Post-Market Surveillance of Motiva Implants® 12

0.36%

Overall complication rate

with Motiva Implants[®] SmoothSilk[®]/SilkSurface^{®®}

3 year retrospective clinical data in 5,813 patients with 16 plastic surgeons at 1 study site¹⁰

Implant related events¹¹ 6 year report on prospective safety outcomes

No implant rupture, capsular contracture, double capsule or late seroma at 6 years following 35 patients in a prospective 10 year follow-up study with MRI assessment¹¹

CHOOSE WITH **CONFIDENCE**



Although chronic inflammation-related complications with textured devices may be less common, smooth implants may be selected to minimize the risk. Traditional smooth implants have a high incidence of capsular contracture, whereas Motiva Implants[®] show a low risk of both capsular contracture and BIA-ALCL.^{10,11,12}

0%

References

Bapras.org.uk. 2020. COVID-19 Advice For Members | BAPRAS. [online] Available at: ">http://www.bapras.org.uk/professionals/About/member-resources/covid-19-advice-for-members>">http://www.bapras.org.uk/professionals/About/member-resources/covid-19-advice-for-members>">http://www.bapras.org.uk/professionals/About/member-resources/covid-19-advice-for-members>">http://www.bapras.org.uk/professionals/About/member-resources/covid-19-advice-for-members>">http://www.bapras.org.uk/professionals/About/member-resources/covid-19-advice-for-members>">http://www.bapras.org.uk/professionals/About/member-resources/covid-19-advice-for-members>">http://www.bapras.org.uk/professionals/About/member-resources/covid-19-advice-for-members>">http://www.bapras.org.uk/professionals/About/member-resources/covid-19-advice-for-members>">http://www.bapras.org.uk/professionals/About/member-resources/covid-19-advice-for-members>">http://www.bapras.org.uk/professionals/About/member-resources/covid-19-advice-for-members>">http://www.bapras.org.uk/professionals/About/member-resources/covid-19-advice-for-members>">http://www.bapras.org.uk/professionals/About/member-resources/covid-19-advice-for-members>">http://www.bapras.org.uk/professionals/About/member-resources/covid-19-advice-for-members>">http://www.bapras.org.uk/professionals/About/member-resources/covid-19-advice-for-members>">http://www.bapras.org.uk/professionals/About/member-resources/covid-19-advice-for-members>">http://www.bapras.org.uk/professionals/About/member-resources/covid-19-advice-for-members>">http://www.bapras.org.uk/professionals/About/member-resources/covid-19-advice-for-members>">http://www.bapras.org.uk/professionals/About/member-resources/covid-19-advice-for-member-resources/covid-19-advice-for-member-resources/covid-19-advice-for-member-resources/covid-19-advice-for-member-resources/covid-19-advice-for-member-resources/covid-19-advice-for-member-resources/covid-19-advice

Chacón M, Chacón M, Fassero J. Six-Year Prospective Outcomes of Primary Breast Augmentation with Nano-Surface Implants. Aesthet Surg J. 2018;39(5):495-508.

Funderburk, C. D., Batulis, N. S., Zelones, J. T., Fisher, A. H., Prock, K. L., Markov, N. P., ... Nigriny, J. F. (2019). Innovations in the Plastic Surgery Care Pathway. Plastic and Reconstructive Surgery, 144(2), 507–516. doi:10.1097/prs.00000000005884

Liu, Z., Zhang, Y., Wang, X. et al. Recommendations for Surgery During the Novel Coronavirus (COVID-19) Epidemic. Indian J Surg 82, 124–128 (2020). https://doi.org/10.1007/s12262-020-02173-3

James GA, Boegli L, Hancock J, Bowersock L, Parker A, Kinney BM. Bacterial Adhesion and Biofilm Formation on Textured Breast Implant Shell Materials. Aesthetic Plast Surg. 2019 Apr;43(2):490-497. doi: 10.1007/s00266-018-1234-7.

Maintaining your private practice during Covid-19 crisis infographic [online] available athttps://www.plasticsurgery.org/documents/medical-professionals/Maintaining-Your-Privat-Practice-During-COVID19.pdf Accessed May 2020.

Recommendations From The Aesthetic Society Covid 19 Task Force. [online] Available at: https://www.surgery.org/downloads/COVID-19/Recommendations-from-The-Aesthetic-Society-COVID-19-Safety-Task-Force-050520.pdf> [Accessed 7 May 2020].

Royal College of Surgeons. 2020. COVID-19: Good Practice For Surgeons And Surgical Teams — Royal College Of Surgeons. [online] Available at: https://www.rcseng.ac.uk/standards-and-research/standards-and-guidance/good-practice-guides/coronavirus covid-19-good-practice-for-surgeons-and-surgical-teams/> [Accessed 7 May 2020].

Royal College of Surgeons. 2020. Leading Your Practice Through Crisis Recovery Of Surgical Services During And After COVID-19 — Royal College Of Surgeons. [online] Available at: https://www.rcseng.ac.uk/coronavirus/recovery-of-surgical-services/ [Accessed 7 May 2020].

Royal College of Surgeons. 2020. Recovery Of Surgical Services During And After COVID-19 — Royal College Of Surgeons. [online] Available at: https://www.rcseng.ac.uk/coronavirus/recovery-of-surgical-services/> [Accessed 7 May 2020].

Royal College of Surgeons. 2020. What will the Aesthetic Industry Look like After COVID-19?— Royal College Of Surgeons. [online] Available at: https://www.rcseng.ac.uk/coronavirus/recovery-of-surgical-services/ [Accessed 7 May 2020].

Covid-19 hub, Royal College of Surgeons (2020) RACS. [online] Available at: https://www.surgeons.org/media-centre/covid-19-information-hub#Useful%20guidelines> [Accessed 7 May 2020].

Resumption of elective surgery [online] available at https://www.plasticsurgery.org/for-medical-professionals/covid19-member-resources/resumption-of-elective-surgery accessed May 2020. When to use surgiclal facemask or FFP3 [online] available at:[online] available at: https://coronavirus.newcastle-hospitals.nhs.uk/content/uploads/2020/04/NHSE-PHE-How-to-put-on-and-fit-check-an-FFP3-respirator.pdf accessed May 2020. Sforza M, Zaccheddu R, Alleruzzo A et al. Preliminary 3-year evaluation of experience with SilkSurface and VelvetSurface Motiva silicone breast implants: a single-center experience with 5813 consecutive breast augmentation cases. Aesthet Surg J. 2018; 38(Suppl 2):S62-S73.

Public health England (2020)Quick quide to donning, doffing PPE health and social care [online] available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/877658/Quick_guide_to_donning_doffing_standard PPE_health_and_social_care_poster__.pdf. accessed April 2020.

Surgery in COVID-19 patients: operational directives [online]available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7137852/pdf/13017_2020_Article_307.pdf. access May 2020.

Who.int. 2020. Technical Guidance. [online] Available at: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance> [Accessed 7 May 2020].

