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Perspective

Gynecological Oncology Surgery During COVID-19 Pandemic: What We Should Know

Suresh Kayastha [a,b]

Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) that causes Corona Virus Disease -19 (COVID-19) is a novel virus and hence humans do not have any prior immunity to it.[1] Every human being is susceptible to this viral infection and rapid spread worldwide made WHO declare it as a global pandemic.[2]

Cancer patients are even more vulnerable not only because they are immunocompromised by the disease process itself, but also due to potential effect of chemotherapy, radiotherapy along with substantial effect on their timing of treatment. Patients older than 65 years, and those with pre-existing co-morbidities are considered more at risk.[3,4,5] Considering the increased chances of intensive care unit admission, need of mechanical ventilation and possible mortality, all cancer patients should be educated about preventive measures, personal protection, social distancing and isolation. [6] Another possible impact of COVID-19 could be delays in initial evaluation, diagnosis and initiation of actual treatment which are independent risk factors for cancer related mortality.[6] This is due to limited services provided at the health care facilities, lockdown effects, fear of being infected and economic crisis.

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a- Consultant Gynecologic Oncologist,
b- Kathmandu Cancer Center, Nepal Korea Friendship Municipality Hospital, Nepal.

Corresponding Author:
Suresh Kayastha
Email: drsureshkayastha@gmail.com
ORCID: https://orcid.org/0000-0002-6257-7476

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Implementation of preoperative screening for COVID-19 before initiating treatment for gynecologic cancer is still a debate. Most of the patients are asymptomatic and available Polymerase Chain Reaction (PCR) testing from naso-pharyngeal swab has false negative rate of around 30%.[7] In this pandemic, all cases can be considered positive unless proven otherwise and every possible precaution and protective measure should be taken in the operation theatre to protect the health care workers as well as other patients. PCR should be done at least a week prior to the surgery.[7] As false negative rate is high, checking for symptoms like fever, cough, tiredness, difficulty in breathing, sore throats or flu-like symptoms should be done at the time of admission and preventive and full protective measures should also be taken even if PCR is negative. Another recommendation for the PCR negative cases is to perform Low-dose chest computed tomography (LDCT) scan 48 hours before surgery for characteristic COVID-19 lung changes. [7]

There are many guidelines with alternative management options to help clinicians decide the management of gynecologic cancer during this pandemic.[8,9,10] European Society for Medical Oncology (ESMO) has prioritized patients as high priority, medium priority and low priority for outpatient visits, imaging, surgical oncology, medical oncology and for radiation oncology.[3,4,5] This has been formulated considering emergency conditions associated with cancer patients, clinical or radiological stage, histological variant and grade, ongoing or scheduled chemotherapy or radiation, and patients on trials and palliative therapy. The details are made available in ESMO website for different gynecologic malignancies like ovarian, endometrial and cervical cancer.[3,4,5]

Patients with gynecologic malignancy should be triaged for observation or intervention. Basic principle is to prioritize intervention for oncologic emergencies and initiate treatment for aggressive or advanced stage disease and reasonably postpone intervention for benign or pre-invasive or early stage low grade malignancy after informed consent.[6] A simple categorization can be category 1 or low acuity surgery that are not life threatening and can be postponed for few weeks or months.[6] This includes management of pre-invasive lesion of cervix or endometrium. Category 2 or intermediate acuity surgery includes those conditions that are not life threatening but with potential future morbidity or mortality.[6] Low risk cancer like early cervical cancer and well differentiated endometrial cancers with co-morbidities are some of the examples for which surgery can be postponed for reasonable period after informed decision making and in case surgery is done, they should be considered for early discharge post operatively.[6] Category 3 or high acuity surgery includes life threatening conditions like bowel obstruction, highly symptomatic patients, type II endometrial cancers, ovarian cancer, interval debulking surgery after 3–4 cycles of chemotherapy, uterine sarcoma, those in need of emergency procedures, excision of malignant recurrences and gestational trophoblastic neoplasm.[6] Surgery should not be postponed if COVID-19 census is low and resources permit. Only life saving procedure should be done when there is high burden of COVID-19 cases and with limited resource supply and rest should be closely observed. Selected cases should be subjected to neo-adjuvant therapy after informed consent.[6]

When surgery is planned, laparoscopic procedures are preferably avoided.[6] After surgery also, Enhance Recovery After Surgery (ERAS) protocol may be implemented for rapid recovery, early discharge and to decrease chance of being infected.[11] The key components of ERAS protocol in the preoperative setting is to avoid mechanical bowel preparation, provide light meal up until six hours, and consume clear fluids including oral carbohydrate drinks up until two hours before initiation of anesthesia and encourage use of pre-medications (acetaminophen, non-steroidal anti-inflammatory drugs, anti-emetics). Similarly, intraoperative measures include maintenance of normothermia and euvolemia, avoidance of surgical drains and nasogastric tubes and infiltration of wound with local anesthetic agents. Post-operative measures are to prevent nausea and vomiting using ≥2 anti-emetics (multimodal approach), early introduction of solid diet post-operatively (day 0–1), multimodal narcotic-sparing post-operative analgesia (use of scheduled non-narcotic medications with oral narcotic medications only as needed), peripheral lock intravenous when patient has 600 ml oral intake, remove urinary catheter on post-operative day one in the absence of contraindications and active mobilization.[11]

Telemedicine is a useful tool for follow-up of patients.[7] But it is limited by the inability to perform physical examination. Considering the COVID-19 pandemic, remote consultation should be preferred rather than face to face visits and patient should be called for evaluation based on reported symptoms.[7]

In conclusion, every case of gynecologic malignancies needs to be considered as COVID-19positive cases and adequate precautions should be taken. They should be triaged for immediate intervention or reasonably rescheduled for treatment after informed consent based on their clinical profile.

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REFERENCES:

1. Biswas A, Bhattacharjee U, Chakrabarti AK, Tewari DN, Banu H, Dutta S. Emergence of Novel Coronavirus and COVID-19: whether to stay or die out? Crit Rev Microbiol. 2020;46(2):182-193. PMID: 32282268 DOI: https://doi.org.10.1080/1040841X.2020.1739001

2. World Health Organization. WHO announces COVID-19 outbreak a pandemic. 2020 Mar 12. Available from: http://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/news/news/2020/3/who-announces-covid-19-outbreak-a-pandemic

3. ESMO Guidelines, Cancer Patient Management during the COVID-19 Pandemic, ESMO Management and Treatment Adapted Recommendations in the Covid-19 Era: Endometrial Cancer. Available from: https://www.esmo.org/guidelines/cancer-patient-management-during-the-covid-19-pandemic/gynaecological-malignancies-endometrial-cancer-in-the-covid-19-era.

4. ESMO Guidelines, Cancer Patient Management during the COVID-19 Pandemic, ESMO Management and Treatment Adapted Recommendations in the Covid-19 Era: Cervical cancer. Available from: https://www.esmo.org/guidelines/cancer-patient-management-during-the-covid-19-pandemic/gynaecological-malignancies-cervical-cancer-in-the-covid-19-era

5. ESMO Guidelines, Cancer Patient Management during the COVID-19 Pandemic, ESMO Management and Treatment Adapted Recommendations in the Covid-19 Era: Ovarian cancer. Available from: https://www.esmo.org/guidelines/cancer-patient-management-during-the-covid-19-pandemic/gynaecological-malignancies-epithelial-ovarian-cancer-in-the-covid-19-era.

6. Bhatla N, Singhal S. The COVID-19 Pandemic and Implications for Gynaecologic Cancer Care. Indian J Gynecol Oncolog. 2020;18(2):48. DOI: https://doi.org/10.1007/s40944-020-00395-7

7. Lavoué V, Akladios C, Gladieff L, Classe JM, Lécuru F, Collinet P. Onco-gynecologic surgery in the COVID-19 era: Risks and precautions-A position paper from FRANCOGYN, SCGP, SFCO, and SFOG. J Gynecol Obstet Hum Reprod. 2020;101787 [Epub ahead of print]. PMID: 32407899 DOI: https://doi.org/10.1016/j.jogoh.2020.101787

8. Ramirez PT, Chiva L, Eriksson AGZ, Frumovitz M, Fagotti A, Martin AG,et al.COVID-19 Global Pandemic: Options for Management of Gynecologic Cancers. International Journal of Gynecologic Cancer. 2020; [Epub ahead of print]. DOI: https://doi.org/10.1136/ijgc-2020-001419

9. British gynecological cancer society. BGCS framework for care of patients with gynaecological cancer during the COVID-19 Pandemic. Available from: https://www.bgcs.org.uk/wp-content/uploads/2020/03/BGCS-covid-guidance-v1.-22.03.2020.pdf

10. Society of gynecologic oncology. Gynecologic Oncology Considerations during the COVID-19 Pandemic. Available from: https://www.sgo.org/clinical-practice/management/covid-19-resources-for-health-care-practitioners/gyn-onc-considerations-during-covid-19/

11. Thomakos N, Pandraklakis A, Bisch SP, Rodolakis A, Nelson G, et al. ERAS protocols in gynecologic oncology during covid-19 pandemic. International Journal of Gynecologic Cancer. 2020; [Epub ahead pf print]. DOI: https://doi.org/10.1136/ijgc-2020-001439