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COVID-19 Global Pandemic: Options for Management of Gynecologic Cancers

Pedro T Ramirez,¹ Luis Chiva ,² Ane Gerda Z Eriksson,³ Michael Frumovitz,¹ Anna Fagotti,⁴ Antonio Gonzalez Martin,⁵ Anuja Jhingran ,⁶ Rene Pareja^{7,8}

For numbered affiliations see end of article.

Correspondence to

Dr Pedro T Ramirez, Gynecologic Oncology, MD Anderson Cancer Center, Houston, TX 77030, USA; peramire@mdanderson.org

Received 24 March 2020 Accepted 24 March 2020 Our world is facing a devastating crisis in the growing pandemic associated with the coronavirus (COVID-19) disease. As many nations take steps to implement strategies to contain the spread of this disease, we continue to see the tremendous impact this is having on the numerous healthcare workers who unite to overcome this tragic infection. We also recognize the concerns by both physicians and patients as it pertains to the management of patients diagnosed with cancer. We recognize that in this special situation we must continue to provide our gynecologic oncology patients with the highest quality of medical services and at the same time assure that we maximize the safety not only of our patients and their families but also of the medical staff and all associated teams that care for patients both in the inpatient and outpatient settings. To that end, the Editorial Team of the International Journal of Gynecological Cancer have compiled evidence-based data using established guidelines to propose strategies to optimize care of our patients while at the same time offering potential options to alleviate the burden to the healthcare system when resources may need to be diverted to the direct care of patients affected by the coronavirus (COVID-19) disease. Our proposal is intended as a tool for consideration and certainly not as a strategy for permanent change in patterns of practice. The goal is to share options, as gathered collectively by our team, in both the management and surveillance of patients diagnosed with gynecologic cancers during this time of global crisis.

In considering management of disease, we must recognize that in many centers, access to routine visits and surgery may be either completely restricted or significantly reduced. We must, therefore, consider options that may still offer our patients a treatment plan that addresses their disease while at the same time limiting risk of exposure. It will be imperative to explore options that reduce the number of procedures or surgical interventions that may be associated with prolonged operative time, risk of major blood loss, necessitating blood products, risk of infection to the medical personnel, or admission to intensive care units (ICUs). These are among some considerations based on point of care for the patient.

OUTPATIENT CLINIC VISITS

- Restriction of visits only to new patients or consults that are absolutely necessary to address an acute oncologic issues and to those patients in active treatment for their disease.
- Limiting number of physicians and healthcare providers (advanced nurse practitioners or nurses) involved in providing ambulatory care to minimize exposure to all involved.
- c. Consideration of restricting personnel to those that are absolutely essential for the care of the patient.
 Thus, consideration of dismissing residents and medical students of their responsibilities in the ambulatory care setting.
- d. Limiting accompanying family members to only one person, when such person is considered absolutely necessary, as in situations when the patient has physical or psychological limitations. In addition, it is also confirmed that such person does not have suspicion of coronavirus infection or has been in contact with anyone suspected of such exposure.
- e. Postponing all routine follow-up/surveillance visits, or transition to telemedicine/web-based consultation, if resources allow, until crisis has stabilized and it is considered safe to return to normal operating procedures. Patients to notify healthcare team of any new or concerning issues by telephone or electronic correspondence.
- f. Consideration of web-based consultation for issues of concern to allow for proper, safer, and faster triaging.
- g. Consideration of postponing any type of intervention that is not absolutely necessary, such as routine imaging studies or serum markers, in patients who are asymptomatic and have no evidence of disease based on most recent evaluation.

MANAGEMENT OF DISEASE

Cervical Cancer

 a. Pre-invasive disease: According to American Society for Colposcopy and Cervical Pathology (ASCCP) recommendations, individuals with lowgrade cervical cancer screening tests may have



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Editorial

- postponement of diagnostic evaluations for 6–12 months. Individuals with high-grade cervical screening tests should have diagnostic evaluation scheduled within 3 months.
- b. Early-stage cervical cancer: In a setting where oncologic surgery is still allowed, proceeding with standard of care is recommended. However, when access to surgery is limited, these steps may be considered. Assuring that disease is localized by imaging studies, such as CT scans or PET/CT imaging (if available), and if so, consideration of postponing procedures that may be considered high-risk of prolonged operative time, or potential intraoperative and/or postoperative complications, such as radical trachelectomy or radical hysterectomy, for a period of 6–8 weeks, or until crisis resolves. In the setting of microscopic disease or low-risk disease (<2 cm, low-risk histology), consideration for conization or simple trachelectomy ± sentinel lymph nodes, if available and feasible. In the setting of gross visible tumor, consideration of neoadjuvant chemotherapy.</p>
- c. Locally-advanced disease: Consider hypofractionation (increase dose per day and reduce the number of fractions) to reduce the number of times the patient has to come in for hospital visits and treatments. According to the American Brachytherapy Society, brachytherapy procedures for cervical cancer patients should not be delayed in patients without COVID-19 symptoms. For radiation therapy patients that are visiting on a daily basis, consider changing face to face weekly visits to telemedicine, unless examination is required.

Endometrial Cancer

- a. Low-risk patients: Patients with grade 1 disease can be considered for conservative management with non-surgical options, including systemic hormonal therapy or intrauterine devices.
- b. High-risk patients: Patients with higher-risk disease (grade 2 or 3 or high-risk histology) should be considered for simple hysterectomy and bilateral salpingo-oophorectomy alone ± sentinel lymph nodes, if available and feasible, and/or postoperative management based on uterine risk factors. Risk of laparoscopic surgery concerning pneumoperitoneum in the setting of COVID-19 must be weighed against risk of laparotomy.
- Advanced disease: Patients with advanced disease should be considered for tissue biopsy to confirm diagnosis and proceeding with systemic therapy.

Ovarian Cancer

- a. In suspected early disease, consideration of multiple factors, such as age and family history of breast/ovarian cancer, physical examination, and thorough radiologic evaluation with pelvic ultrasound with color Doppler, MRI, and/or serum markers, such as CA125 and HE4, to assess risk of malignancy in adnexal mass.
- b. In patients with advanced stage disease, consideration of tissue biopsy to confirm diagnosis of disease and proceeding with neoadjuvant chemotherapy until crisis is resolved and consideration of surgery at a later time.
- c. In patients who have already started neoadjuvant chemotherapy, consideration of extending the treatment plan to six cycles, rather than three, before consideration of interval cytoreductive surgery. However, decision in this setting is highly dependent on resource availability and access to the operating room for

- the respective institution, recognizing that additional cycles of chemotherapy may deplete bone marrow reserve and lead to higher susceptibility to infection.
- d. In patients who have completed up-front adjuvant platinum-based chemotherapy, consideration of no further treatment. Maintenance therapy may require repeat visits for toxicity evaluation which may place added burden on patient, families, and healthcare teams with the risk of added exposure to infection.
- e. For patients traveling long distances for treatment, consideration of arranging with local oncologists to administer therapy, in order to avoid traveling, particularly by air, and further increasing risk of exposure and infection. Offer distant evaluation for toxicity through telecommunication.
- f. For patients who have progressed on current treatment for recurrent disease, decisions regarding initiation of additional chemotherapy should be based on clinical judgment and potential for benefit based on expected response of subsequent available agents.

TREATMENT PLANNING

- a. Local patients: Consideration of undergoing imaging studies and indicated laboratory tests and agreeing to having the physician contact them by telephone to discuss management beyond the point of evaluation.
- b. Distant patients: Consideration of undergoing imaging studies and indicated laboratory tests locally in their home towns and sending discs with imaging either electronically or by mail to then have the physician discuss the management plan.
- International patients: Consideration for postponing visits from international patients until further notification from global health authorities.

CLINICAL TRIALS

- Screening, evaluation, consenting, and accrual to a clinical trial are usually associated with multiple visits to healthcare providers and numerous interactions between patients, physicians, and research coordinators.
- b. There should be a limitation on the number of trials that remain open to new patient accrual. Trials that remain open to new patient accrual should be those with curative intent or those where there is a life-prolonging or life-saving opportunity over current standard of care options or when there is no standard of care option.
- c. For patients already on an investigational trial, there should be continuation of the trial treatment. However, consideration should be given to implementing video toxicity evaluation. In addition, if at all possible, provision of study medications by mail.
- d. In the event of a trial patient testing positive for COVID-19, it is imperative that such patient be removed from the study and management of such patient follow management recommendation as per the involved institution.
- e. All research personnel should be encouraged to remain at home and consider downsizing the number of research coordinators physically present in the hospital to address follow-up of patients that are currently on clinical trials.

ACADEMIC ACTIVITIES

- a. In an effort to continue best standard of care for our patients, we should strive to maintain active and transparent communication as it pertains to patient management and outcomes.
 We should consider implementation of academic activities, such as tumor board or multidisciplinary conference, through webbased systems.
- Teleconferencing to learn and explore options for improving the approach to care should be sought and flow of communication with other institutions is to be encouraged.

PALLIATIVE AND SUPPORTIVE CARE MANAGEMENT

- a. It is imperative that during this time of crisis, women diagnosed with gynecologic cancers understand that needs related to quality of life, patient end-of-life goals, advance care planning, pain and symptom management, and support of caregivers remain a priority of the healthcare team.
- b. Multidisciplinary collaboration should be implemented to provide 'rapid response' to assure that supportive care and hospice care is established as quickly as possible, either in a facility or at home, in order to provide the patient the most comprehensive care and at the same time alleviate hospital volume so that beds may be allocated to patients needing acute medical attention, either related or unrelated to the coronavirus disease.
- c. Consideration for video consultations for all outpatient visits and most inpatient visits in order to minimize bidirectional exposure to coronavirus infection of both the patient and the healthcare team.
- d. Family engagement is of the utmost importance for patients requiring supportive care and hospice care. To this end, centers are encouraged to implement strategies to educate family members on how to provide most or all services pertaining to symptom control and management of physical needs for the patient while at home.

TEAM SUPPORT AND ENCOURAGEMENT

As news of the coronavirus (COVID-19) spreads throughout the world there is a growing fear among our population; this is also impacting healthcare providers who are not only concerned about their own well-being and safety but also that of their families. In times of difficulty, we must assure that those in direct contact with patients are provided with the resources to voice their concerns and

address issues that may be limiting their ability to render the best care to their patients. We must support and encourage each other as we battle this grave pandemic.

In conclusion, we must highlight that the opinions and suggestions rendered here are those of the collective Editorial Team at the *International Journal of Gynecological Cancer* and are not intended as authoritative or as a new standard of care. These are to be considered as we face this massive healthcare crisis and certainly should not supersede strategies established by local or regional authorities as best fit to conform with the crisis specific to any hospital or healthcare facility. We encourage continued efforts in promoting social distancing, adequate hygiene, and absolute compliance with the recommendations of agencies such as the Centers for Disease Control and Prevention (www.cdc.gov) and the World Health Organization (www.who.int).

Author affiliations

¹Gynecologic Oncology, The University of Texas, MD Anderson Cancer Center, Houston, Texas, USA

²Obstetrics and Gynecology, Clinica Universidad de Navarra, MADRID, Spain ³Department of Gynecologic Oncology, Division of Cancer Medicine, The Norwegian Radium Hospital; Oslo University Hospital, Oslo, Norway

⁴Woman and Child's Health Department, Universita Cattolica del Sacro Cuore Facolta di Medicina e Chirurgia, Roma, Roma, Italy

Medical Oncology, Clinica Universidad de Navarra, Madrid, Madrid, Spain Radiation Oncology, The University of Texas M. D. Anderson Cancer Center, Houston, Texas, USA

⁷Gynecologic Oncology, Clinica ASTORGA, Medellin, Colombia ⁸Instituto Nacional de Cancerología, Bogotá, Colombia

Twitter Pedro T Ramirez @pedroramirezMD, Luis Chiva @Ichiv4, Ane Gerda Z Eriksson @agz_eriksson, Michael Frumovitz @frumovitz, Anna Fagotti @ annafagottimd, Anuja Jhingran @ajhingra@mdanderson.org and Rene Pareja @ RParejaGineOnco

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ORCID iDs

Luis Chiva http://orcid.org/0000-0002-1908-3251 Anuja Jhingran http://orcid.org/0000-0002-0697-1815