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Editorial

Onco-gynecologic surgery in the COVID-19 era: Risks and precautions—A position paper from FRANCOGYN, SCGP, SFCO, and SFOG



The Coronavirus Disease 2019 (COVID-19) pandemic has forced us to completely reorganize our health care system to accommodate patients infected with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). This exceptional situation has placed severe constraints on the provision of care to patients with other conditions, and especially those with cancer. Although many cancer patients, including those with gynecologic cancer, require surgery, access to both operating theaters and to postoperative recovery rooms is limited. In addition, cancer care requires a multidisciplinary approach, which often involves adjuvant treatment with chemotherapy and/or radiotherapy, requiring multiple visits to health care facilities. These visits increase the risk of contracting COVID-19, which is more likely to be severe in patients undergoing chemotherapy or surgery [1]. The main challenge in managing cancer patients is how to prevent loss of opportunity without placing patients at an increased risk of infection. Health care workers caring for these patients are also at an increased risk of viral contamination, highlighting the need for appropriate safety measures and precautions in a broad strategy that requires discussion at the national level.

Avoiding loss of opportunity for patients with gynecologic cancer

Whenever possible, cancer-specific diagnostic or treatment guidelines should be applied as closely as possible and without delay. In the case of endometrial cancer, for example, uterine specimens must be sent for histopathologic examination in patients with post-menopausal metrorrhagia, magnetic resonance imaging must be performed as part of the preoperative assessment, and patients must be treated according to guideline recommendations and preoperative assessment of risk factors [2]. Likewise, patients with ovarian and uterine cancer should be treated in accordance with the recommendations of the National Cancer Institute [3,4]. Alternative approaches, in line with those suggested by Akladios et al. [5,6], can only be contemplated in overstretched hospitals that have restricted access to operating rooms due to the coronavirus crisis. In this respect, it is important to remember that treatment using available resources is better than no treatment in a patient with cancer.

Patients who become infected with SARS-CoV-2 while being treated for cancer have a greater risk of developing a severe form of COVID-19. According to data from China, patients with cancer are four to eight more times likely to die of COVID-19 complications in the 4 weeks following chemotherapy or surgery than those without cancer [1]. Compromised immune systems are also likely to have a role in patients with comorbidities, particularly if they are incubating the virus at the time of surgery. It should be noted, however, that the above findings are based on a small number of patients who mostly had lung cancer and possibly hematologic malignancies. Whatever the case, in the interest of caution, surgery and chemotherapy should be deferred in cancer patients who have tested positive for COVID-19 wherever possible.

In light of genuine concerns about loss of opportunity for cancer patients during the COVID-19 emergency crisis, the French Society of Gynecologic and Pelvic Surgery (SCGP) has created an online tool for health professionals across the country to report on the management of gynecologic cancer cases during this exceptional period (<https://www.scgp-asso.fr/actualites/enquete-francogyn-sur-la-prise-en-charge-des-patientes-atteintes-de-cancer-gynecologique-en-periode-de-covid-19/>). In addition, now, more than ever, it is necessary to hold multidisciplinary consensus meetings to agree on optimal strategies that provide the best possible risk-benefit ratio to cancer patients.

Precautions for reducing the risk of SARS-CoV-2 infection during chemotherapy

The following precautions can be taken to minimize the risk of SARS-CoV-2 infection during chemotherapy:

- Do not treat patients who have tested positive for COVID-19. Telephone patients in advance to check for symptoms and check again when the patient arrives for their appointment.
- Increase the use of granulocyte colony stimulating factor.
- Cancel all non-essential weekly chemotherapy sessions to prevent repeat visits.
- Adjust palliative chemotherapy treatments.
- Implement social distancing measures in waiting rooms

Precautions for reducing the risk of viral contamination among operating room staff

A separate circuit should be created for cancer patients with COVID-19 whose surgery cannot be postponed. Specific recommendations for anesthesiologists, surgeons, etc. are available on the websites of learned societies (e.g., the SFCO [French Society of Oral Surgery] and the SFAR [French Society of Anesthesia & Intensive Care Medicine]). Intubation is a high-risk procedure and anesthesiologists must be equipped with proper personal protective equipment (PPE), including goggles, a gown, two pairs of gloves, and an FFP2 face mask. Strict use of PPE is also required for surgeons and assistants working in the surgical field. Surgical smoke should be extracted as close to the source as possible, and pneumoperitoneum evacuated in a closed circuit with a filtering system [7]. Some learned societies have also published recommendations on the use of negative-pressure rooms. Nevertheless, current guidance is likely to evolve as our understanding of COVID-19 improves and we therefore recommend regular consultation of the societies' websites. If a patient's COVID-19 status is unknown, as it is for the vast majority of patients requiring surgery, facilities should implement the same protective measures as they would for a patient known to be positive. Application of these measures requires time and significantly increases turnover times, reducing even further the number of patients who can be operated on. Finally, it should be recalled that uncertainty about a patient's COVID-19 status can cause anxiety among health care workers.

Preoperative screening for COVID-19

Most patients scheduled for surgery will have an unknown COVID-19 status. Considering the risk of asymptomatic and pre-symptomatic (during the incubation period) transmission, preoperative screening to determine which patients are positive and which are negative would certainly help minimize risks for both patients and health care workers. While deferral of non-essential surgery would protect COVID-19-positive patients from potentially more severe disease, the implementation of protective measures in operating rooms would protect health care workers from viral contamination. Many hospitals now systematically treat all surgical patients as positive unless proven otherwise. Others recommend PCR testing of nasal swab specimens a week before surgery. As PCR has a false-negative rate of around 30%, performance of low-dose chest computed tomography (LDCT) scan in the 48 h before surgery has been recommended for patients with a negative PCR test. Observation of characteristic COVID-19 lung images could also provide a faster means of detecting COVID-19-positive patients than PCR. Patients scheduled for surgery are also being called in advance to check for symptoms, with follow-up on the day of the operation. This strategy combining PCR testing, LDCT, and checking of symptoms is an interesting option, but its sensitivity remains to be validated.

Thus, preoperative screening is important but requires validation at a national level particularly considering the increased workload once lockdown measures are eased and hospitals begin to lift restrictions on elective surgery. This period is likely to lead to a resurgence of the virus, as at most 10–20% of the French population will have probably been infected.

The role of telemedicine in onco-gynecology

Telemedicine is an interesting option to reduce risk of SARS-CoV-2 infection by eliminating the need for on-site visits. Nevertheless, it

would appear difficult to deprive a patient recently diagnosed with cancer of a face-to-face consultation, as the patient requires clinical examination before surgery. Used with care, however, virtual consultations could be used for triage purposes (i.e., to decide which patients need to be seen in person) and to determine whether additional tests are needed before the patient is called in.

Telemedicine is also a useful tool for follow-up or postoperative visits. Its main limitation in this context is that certain patients, such as those with uterine cancer, need to be physically examined. However, for as long as the COVID-19 outbreak continues, remote postoperative consultations are preferable to face-to-face visits and can be used to identify patients who need to be evaluated in person based on the symptoms they report. The long-term effects of remote monitoring and treatment of patients with gynecologic cancer will need to be studied.

Conclusion

The COVID-19 pandemic has shaken the world and led to an overhaul of health care systems as we know them to accommodate the influx of patients infected with SARS-CoV-2. We cannot, however, allow this reorganization to result in loss of opportunity for patients without COVID-19. The current crisis has altered current practices at a breathtaking pace, as evidenced by the rapid developments in telemedicine. Many issues, however, remain to be resolved. Easing of restrictions is going to require nationwide screening of cancer patients for COVID-19, both to protect them from severe illness and to minimize risks to other patients and health care workers.

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Received 24 April 2020

Available online 11 May 2020