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Challenges and management options of tubo-ovarian cancer in the midst of SARS-CoV-2 pandemic



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Dear Editor

With more than 40.000 deaths, United Kingdom (UK) has recently overtaken Italy as the country with the highest number of SARS-CoV-2 related deaths in Europe. London is currently the worst affected region of the UK, followed by the North West, and then the South East. The SARS-CoV-2 outbreak and the rapid spread of the disease have led to an enormous burden over NHS. The dramatic increase of affected individuals requiring hospital-based care, has forced to set up new intensive care units (ICUs) and to establish dedicated SARS-CoV-2 wards.

Notably, many gynaecological oncology centres have been established as some of the most important SARS-CoV-2 hospitals during the pandemic. These unprecedented circumstances have posed an ethical challenge to multidisciplinary teams, considering the frail equilibrium between optimal oncological outcome and patients's safety. Subsequently, elective surgery for gynaecological malignancies has markedly decreased, to relatively minimise exposure to SARS-CoV-2 risk and increase the ICU availability. This is particularly relevant for the management of tubo-ovarian cancer.

To date, there is no clear evidence concerning the impact of SARS-CoV-2 on tubo-ovarian cancer care. Generally, cancer patients are seemingly at increased risk of SARS-CoV-2 infection owing to the underlying immunosuppression. Evidence deriving from small retrospective studies suggests that infected cancer patients are at higher risk of death [1]. Moreover, co-morbidities should also be taken into consideration, as the existence of three or more co-morbidities increases the mortality rate up to approximately 50% amongst cancer populations [2]. On the other hand, a potential SARS-CoV-2 infection could lead to delays in diagnosis and treatment; hence, compromising the oncological outcome.

Considering the uncertainty, as to the optimal tubo-ovarian cancer management, professional bodies have put in place recommendations to guide clinicians prioritise ovarian cancer care [3]. The general guiding principle of these recommendations is the adoption of a "do no harm" approach. Surgical decision making should be based upon the stage and type of the disease, co-morbidities, and logistic challenges, including ICU availability and access to chemotherapy services. To this end, we have adopted our strategy to stratify women for whom surgery is time-critical and those for whom surgical management could be deferred. The latter applies to FIGO stage III/IV tubo-ovarian cancer women, who are currently being treated with neo-adjuvant chemotherapy (NACT). Primary cytoreduction for advanced tubo-ovarian cancer usually includes radical/ultra-radical cytoreduction associated with prolonged operative time, risk of major blood loss/transfusion, risk of infection, or admission to ICU [4]. On the other hand, NACT followed by delayed cytoreduction is associated with decreased post-surgical morbidity [4].

According to the cases treated using the 'do no harm' principle, we believe that the following situations should be considered for surgery: (1) radiologically confirmed intestinal obstruction or perforation in newly diagnosed tubo-ovarian cancer, (2) pelvic mass with torsion or causing urinary/intestinal obstruction, (3) post-operative complications, (4) establishment of cancer diagnosis when high suspicion exists, (5) ovarian mass with high suspicion of malignancy; (6) delayed cytoreduction after 3–4 cycles of chemotherapy; and (7) symptomatic women necessitating palliative procedure.

Cancer resources have been partially accommodated into protected cancer hubs that run parallel to the essential SARS-CoV-2 centres in an attempt to tackle the increased demand and minimise the risk of SARS-CoV-2 risk for both patients and health care personnel. When managing women undergoing surgery, the following rules are currently being followed: (1) nurse-led triage to exclude SARS-CoV-2 related symptoms; (2) pre-hospitalisation testing; (3) repeated nasopharyngeal swabs the morning of procedure; (4) cancellation of the procedure if the swabs are positive; (5) use of surgical wards and ICUs dedicated to non-SARS-CoV-2 patients; (6) adoption of enhanced recovery after surgery (ERAS) protocols.

To conclude, the effects of SARS-CoV-2 pandemic can be mitigated to a certain degree for patients with ovarian cancer, by adopting a careful and individualised triage and treatment management. A rigorous counseling concerning the risk of undergoing surgery during SARS-CoV-2 pandemic should be done, whilst the national and international health bodies recommendations will supportively guide clinicians prioritise ovarian cancer care. Implementation of ERAS protocols could offer faster recovery, shorter length of stay and reduced post-operative complications, thus reducing the risk of SARS-CoV-2 infection and increasing the availability of the resources during this time of global crisis.

Declaration of competing interest

None.

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