

The Destiny of a Gynecology Clinic from Bucharest and its' patients during COVID-19 Pandemic – A sad Romanian story

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ABSTRACT

Background/Aim: Since March 2020 when the number of COVID-19 positive patients reported a fulminant increase in Romania, reorganisation of the medical services took place in order to provide the possibility of treating increasing number of cases with this pathology and to diminish as much as possible the number of COVID-19 related deaths. The aim of the current paper is to analyse the outcomes of 273 patients with gynaecological cancers who could not be treated in the service were they were initially addressed.

Material and Method: a total number of 343 patients with gynecologic oncology disorders were addressed to "Dr. Ion Cantacuzino" hospital in Bucharest Romania and could not be treated in this unit due to the fact that it became an auxiliary service for obstetrical COVID positive patients. Results: complete follow up was possible in 273 cases 87 patients were redistributed to other services of gynecologic oncology and received their surgical treatment as planned, 141 patients received their surgical treatment in other clinics after a mean delay of six months while 45 cases were further submitted to oncological treatment, four of them being dead at the end of the study.

Conclusions: modification of hospital structure and diminishing the oncological patients' access to oncologic surgery during COVID pandemic significantly impacted on gynecologic cancer care.

Keywords: COVID-19, pandemic, gynecologic oncology, surgery, impact

INTRODUCTION

Since March 2020 the severe acute respiratory syndrome Coronavirus 2 (SARS-CoV-2) became a serious health problem in Romania and therefore COVID-19 was declared as pandemic in our country too. Increasing number of severe cases which necessitated prolonged hospital in stay and even admission in the intensive care units rapidly conducted to a

lock down of the sanitary system. Therefore, a significant number of services were reserved for positive COVID-19 patients, diminishing in this way the access to the health system of patients diagnosed with chronic diseases [1,2]. As expected, the worst evolution was encountered in cancer patients, the progression of the oncological disease transforming them in certain cases in candidates for palliative care [3]. The

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Article History:

Received: 18 April 2022

Accepted: 28 April 2022

aim of the current paper is to present the outcomes of patients with oncogynecological disorders who were addressed to the Gynecology service of “Dr. Ion Cantacuzino” hospital in Bucharest Romania between March 2020 and May 2021, a period in which the service was transformed in an auxiliary service for obstetrics COVID positive patients and therefore the access of non-obstetrical patients became impossible.

MATERIAL AND METHODS

Due to the high number of cases with COVID-19 infection, the clinic of Gynecology of “Dr. Ion Cantacuzino” hospital in Bucharest Romania was transformed into an auxiliary service for obstetrics COVID positive patients which were identified at the time of presentation in the clinic of Obstetrics of the same hospital. After obtaining the approval of the ethics committee of the same hospital, we identified 343 patients who would be normally being addressed to our service and performed an analysis of their oncological outcome.

RESULTS

In March 2020, due to the high number of COVID-19 infections the service of Gynecology was transformed into an auxiliary service for obstetrics COVID positive patients and the situation was maintained in this manner until May 2021. Therefore, the service in which up to 300 patients with gynecologic oncology disorders had been treated annually in the last years became unavailable for these cases. We further performed an analysis in order to investigate which was the faith of cases diagnosed with gynecologic oncology diseases and who would be normally addressed to our service; a total of 343 patients were identified during the period March 2020 - May 2021. Among the 343 cases, follow up was possible in 273 cases and we observed that 87 patients were redistributed to other services of gynecologic oncology and received their surgical treatment as planned, 141 patients received their surgical treatment in other clinics after a mean delay of six

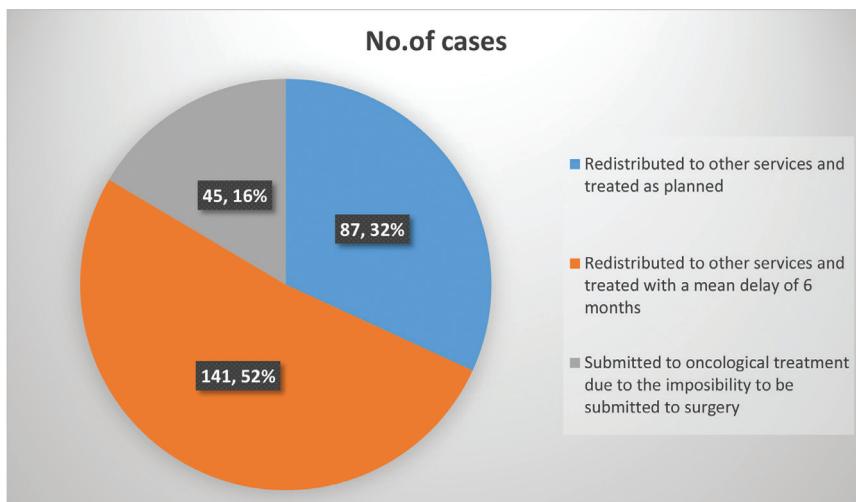


FIGURE 1. The faith of patients who could not be submitted to surgery as planned in our clinic

months while 45 cases were further submitted to oncological treatment (chemotherapy, radiotherapy or both) due to the impossibility of being submitted to surgery in other services. Meanwhile, four out of the 45 cases submitted to oncological treatment died of disease.

Among cases in which a delayed surgical treatment was performed there were 85 cases diagnosed with ovarian cancer, 34 cases diagnosed with cervical cancer, 12 cases diagnosed with endometrial cancer and 10 cases with vulvar cancer. All these cases were placed on waiting lists in the other services in which the programs of gynecologic oncology were not interrupted and were submitted to surgery when the operating theatre was available.

The 45 cases in which the oncological treatment was further initiated had no possibility to be submitted to surgery as first intent option and therefore were taken by the oncologist in order to be included in the program of neoadjuvant or palliative chemo-

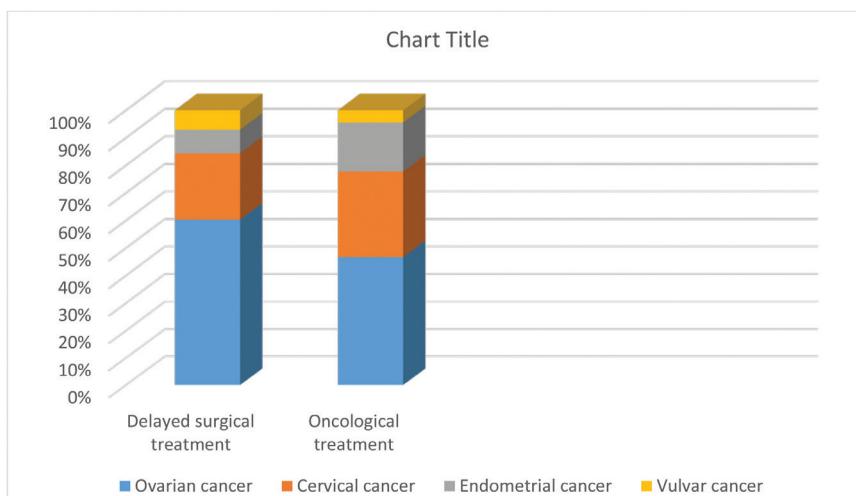


FIGURE 2. Classification of patients according to the type of treatment and type of pathology

therapy and or radiation therapy programs. Among the 45 cases there were 21 cases diagnosed with ovarian cancer, 14 cases diagnosed with cervical cancer, eight cases with endometrial cancer and two cases with vulvar cancer. At the end of the follow up period, four of the 45 cases died due to the progression of the disease – three cases and due to septic shock – one case.

As expected, cases which suffered most from the impossibility of receiving an adequate treatment were those with ovarian cancer, this malignancy being the most commonly encountered one; meanwhile, ovarian cancer was also responsible for the most cases diagnosed in advanced stages of the disease at the time of treatment initiation. Therefore, only 34 cases diagnosed with ovarian cancer benefited from upfront surgery without delay in other operation theatres while other 85 cases benefited from delayed surgery and respectively 21 cases were submitted to neoadjuvant chemotherapy.

DISCUSSIONS

COVID-19 infection was declared as a pandemic one by the World Health Organization in March 2020 and conducted to a significant global crisis affecting both the economic and health systems worldwide [4]. In order to diminish the spread of the virus, multiple measures were taken including self-isolation, shielding patients at risk, tracking the contacts and public lockdown [5]. Meanwhile, in hospitals, multiple measures have been taken in order to offer an adequate support for COVID-19 patients such as transforming different services in COVID-19 reserved areas, including intensive care units; therefore, the number of beds available for non-COVID patients including oncological patients as well as the human resource for these patients significantly diminished leading unfortunately to the temporization of such rapidly evolving pathologies [6,7]. Meanwhile, oncological patients are considered a vulnerable category of patients due to the cancer related immunosuppression even in the absence of any oncological treatment and therefore their access in different medical units was significantly diminished [5]. When facing this unprecedented issue, international gynecologic oncology forums proposed new standards of care for these patients in order to minimize the negative effects of the pandemic [8,9]. Even from the initial time of diagnostic, significant modifications occurred due to the fact that in a large number of cases the face to face examination was initially replaced by telemedicine which has the great disadvantage of not providing the chance to perform a clinical investigation and, in gynaecological disorders, a transvaginal ultrasound. Therefore, in certain cases the initial diagnostic of malignancy was delayed. Meanwhile, cases

in which borderline or low index malignant tumors were suspected a delay of three to six months to the time of treatment has been reported [5].

When it comes to ovarian cancer, cases diagnosed in advanced stages of the disease were rather submitted to neoadjuvant chemotherapy especially at the beginning of the pandemic, due to the fact that most often these patients are considered immunosuppressed, at risk patients who usually necessitate a longer intensive care stay and, overall, a longer hospital in stay; a similar approach was proposed for cases with relapsed ovarian cancer, these patients being considered to have low priority for surgery and were routinely submitted to neoadjuvant systemic chemotherapy [5,10]. Another proposed strategy was to perform a staging laparoscopy in all cases suspected to have advanced stage ovarian or endometrial cancer in order to establish the extent of the disease and to select for surgery cases with limited disease in which a shortened hospital in stay is expected. However, this therapeutic strategy was not widely accepted, a significant number of surgeons considering that laparoscopy should be avoided during pandemic due to the higher risk of COVID-19 spread through the resulting aerosols whenever pneumoperitoneum is created [11,12].

Unfortunately, in our case a clear standardization was not possible and patients with ovarian cancer were readressed to their oncologists; further on, cases in which a rapid place in an operating theatre was not found were submitted to neoadjuvant chemotherapy in order to prevent the spread of the disease. Meanwhile, the per cent of cases who received their standard treatment during this period was of only 31,8% while other 51,6% of cases received a delayed surgical procedure, the mean interval of delay being of six months. A significant paper which aimed to investigate the impact of COVID-19 pandemic on the first line management of gynecologic cancer patients demonstrated that overall, 15% of cases suffered a significant disruption or modification in regard to the first line therapy and underlined the fact that such cases should be rather submitted to surgery in completely segregated, COVID-19 free services in order to diminish the risk of developing postoperative contamination which in such cases could have a fatal outcome [12]. However, similarly to our study, in the paper conducted in 2020 in the United Kingdom the authors reported the fact that up to 80% of patients diagnosed with ovarian cancer reported a certain delay in their treatment due to the COVID-19 pandemic [13].

An interesting study which investigated the impact of COVID-19 pandemic on the gynecologic oncology patients included three hospitals in New York City. The authors came to demonstrate that during the first two months of the COVID-19 pandemic more than one third of cases with gynecologic ma-

lignancies experienced treatment delay, up to one half of these cases reporting a delay of the surgical procedure. Meanwhile the authors underlined the fact that location of the hospital, patients' age at diagnostic, new diagnostic of cancer versus recurrent disease and the presence of a positive COVID test influenced most the treatment options [14].

CONCLUSIONS

COVID-19 pandemic led to a significant delay in terms of diagnostic and treatment of gynecologic

malignancies worldwide. In order to minimise the effect on survival, different strategies were proposed while the therapeutic guidelines have been modified accordingly. Even though, in our case transformation of the Gynecology service into an auxiliary service for COVID-19 obstetrics patients conducted to a significant delay in treating gynecologic cancers which is expected to negatively influence the long-term outcomes.

Conflict of interest: none declared
Financial support: none declared

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