Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
1722P Longitudinal analysis of biochemical and haematological features of cancer patients with COVID-19

A. Tievy, R. Shotton, R. Lee, C. Zhou, K. Banfill, C. Hague, F. Gomes, I.M.J. Weaver, A. Armstrong, T. Cooksley
Medical Oncology, The Christie NHS Foundation Trust, Manchester, UK

Background: Cancer patients (pts) are at increased risk of severe COVID-19 infection and death. Older pts, men and those with haematological malignancies and receiving anti-tumour therapy within 14 days appear to be at highest risk for poor outcomes. In general populations, severe COVID-19 infection has been associated with neutrophilia, raised lactate dehydrogenase (LDH) and C-reactive protein (CRP). Cancer and its treatment affect many haematological and biochemical parameters. We examined whether COVID-19 infection affected these compared to pts’ baseline parameters by longitudinal tracking. We also investigated whether changes were associated with poor outcome.

Methods: Consecutive pts with solid or haematological malignancies presenting with index symptoms and testing positive for SARS-CoV-2 at a tertiary oncology centre were enrolled. In-hospital and outpatient clinical and laboratory data were extracted from the pt record. Paired T-tests were used for longitudinal sampling and ANOVA/Chi squared for outcomes.

Results: 52 pts tested positive (27 male, 25 female; median age 63). 80.5% had solid cancers, and 19.5% haematological. 31/52 pts were lymphopenic prior to infection. Comparing mean pre-infection counts (6 months-14 days PRE) with mean counts from the 5 days following positive test (DURING) lymphocyte counts significantly decreased during infection (p=0.0001). Platelets were significantly reduced during DURING vs. PRE COVID-19 (p=0.0028). 17/52 pts developed transient (median 2 days) neutropenia (≤1x10⁹/L) during infection (6 pts ≤1x10⁹/L, 2 pts <0.5x10⁹/L). 1/7 attributed to cancer/cancer therapy, the rest had no underlying cause. 8/17 pts received growth factor support. Reduced lymphocytes/neutrophils/platelets at diagnosis were not associated with oxygen requirement (O₂) or death. Different CRP trajectories were observed when comparing pts grouped by discharge/O₂/death.

Conclusions: Infection with SARS-CoV-2 commonly affects haematological parameters in cancer pts. High CRP and LDH are associated with poor outcomes.

Legal entity responsible for the study: The Christie NHS Foundation Trust.

Funding: Has not received any funding.

Disclosure: R. Lee: Speaker Bureau/Expert testimony, Research grant/Funding (self); Bristol Myers Squibb; Speaker Bureau/Expert testimony: Astra Zeneca. A. Armstrong: Shareholder/Stockholder/Stock options, Husband has shares: Astra Zeneca. T. Cooksley: Stockholder/Bureau/Expert testimony, Bristol Myers Squibb. All other authors have declared no conflicts of interest.

https://doi.org/10.1016/j.anonc.2020.08.1786

1723P Organizational challenges and oncological activity volumes during the SARS-CoV-2 epidemic peak in Verona, Italy

S. Meleir1, S. Zuliani1, I. Zampiva1, D. Tregnago1, M. Casali1, A. Cavalliere2, A. Fumagalli1, S.T. Riva1, A. Rossi1, F. Zacchi1, E. Zaninotto1, A. Auriemma3, M. Pavarana2, C. Soldà3, L. Benini1, M. Borghesani1, G. Lo Cascio2, E. Tacconelli4, F.M. Uckun3, Z. Arik3
1Medical Oncology, University of Verona - Faculty of Medicine, Verona, Italy; 2Medical Oncology, University of Verona Hospital Trust, Verona, Italy; 3Medical Oncology Department, University of Verona Hospital Trust, Verona, Italy; 4Infectious Diseases, University of Verona - Faculty of Medicine, Verona, Italy

Background: On February 23rd the first case of SARS-CoV-2 infection was diagnosed at the University Hospital Trust of Verona, Italy. On March 13th, the Oncology Section was converted into a 22 inpatient beds COVID unit and we had to reshape our organization and personnel to face the SARS-CoV-2 epidemic, while maintaining our oncological activity.

Methods: We tracked down oncological activity from January 1st to March 31st, 2020, in relationship to the organizational changes implemented and in comparison to the same period of 2019. We also recorded cases of SARS-CoV-2 infection observed in oncology health professionals and hospital admissions of active oncology patients for SARS-CoV-2 infection.

Results: Progressive restrictions in patients’, visitors’, and caregivers’ access to the inpatient and outpatient facilities of the Oncology section and organizational changes were observed during the epidemic peak. Since March 13th, segregated personnel teams were created, one dedicated to the COVID unit and a “clean” one dedicated to oncological patients, resulting in an overall 40% and 43% reduction in oncology-dedicated medical and nursing/auxiliary staff, respectively. As compared with the same trimester in 2019, the overall reduction in total numbers of inpatient admissions, chemotherapy administrations, and specialty visits in the period January-March 2020 was 8%, 6%, and 3%, respectively; based on the weekly average of daily admissions, reduction in some of the oncological activities became statistically significant from week 11. Patient’s acceptance of adopted measures was very high (see abstract by Tregnago D). Overall, 8/85 (9%) health professionals tested positive for SARS-CoV-2 (no hospital admissions and no treatment required) and 7/725 (1.3%) active oncology patients were admitted for SARS-CoV-2 infection (of whom, 2 died of infection-related complications).

Conclusions: A minimal (<10%) reduction in Oncology activity was registered during the peak of SARS-CoV-2 epidemic in Verona, Italy. Organizational and protective measures adopted appear to have contributed to keep infections in both health professionals and oncological patients to a minimum.

Legal entity responsible for the study: University of Verona.

Funding: Has not received any funding.

Disclosure: All authors have declared no conflicts of interest.

https://doi.org/10.1016/j.anonc.2020.08.1787

1724P Changes in the outpatient and inpatient admissions during COVID-19 pandemic: Anticipating and mitigating risks for cancer patients

D.C. Guven1, B. Aktaş2, M.S. Aksoy3, E. Uğurlu4, T.K. Sahin5, H.C. Yildirim6, G. Güner7, N. Kertmen7, O. Dişdar7, S. Klikskap7, S. Aksoy7, Ş. Yalçın7, A. Turker1, F.M. Uckun1, Z. Arik1
1Department of Medical Oncology, Hacettepe University Cancer Institute, Ankara, Turkey; 2Department of Infectious Disease, Hacettepe University Faculty of Medicine, Ankara, Turkey; 3COVID-19 Task Force, Worldwide Clinical Trials, Wayne, PA, USA

Background: Prioritizing the continuum of care for cancer patients while maximizing patient safety is of paramount importance. However, COVID-19 pandemic could cause collateral damage in all domains of cancer care. Here, we evaluated the early changes in the inpatient and outpatient oncology clinics and discuss how we currently anticipate and mitigate risks for cancer patients at the Hacettepe University Cancer Institute by employing adaptive algorithms.

Methods: Patients applying the outpatient clinic and outpatient palliative care (OPC) clinic for the first time and patients admitted to wards in the first 30 days after the first case of COVID-19 in Turkey were evaluated. This data was compared to data from the same time frame in the previous three years.

Results: A total of 868 inpatient and 809 outpatient admissions were evaluated in the study with a 114 OPC clinic admissions. The mean number of daily new patient applications to the outpatient clinic (9.87±3.87 vs. 6.43±1.63, p=0.001) and OPC clinic (3.87±1.49 vs. 1.13±1.46, p<0.001) was significantly reduced compared to the previous years. The reduction in new patient numbers was observed for all tumor types with the exception of lung and head and neck cancers. While the number of inpatient admissions was similar for a month frame (228 vs. 213), the median duration of hospitalization was significantly reduced (2 vs. 3 days). The frequency of hospitalizations for chemotherapy was higher than in previous years (p<0.001). By comparison, the rate of hospitalizations for palliative care (P=0.028) or elective interventional procedures (P=0.001) was significantly reduced.

Conclusions: In our experience, continuing the patients’ treatment with simple pre-cautions was possible with simple measures. There were significant drops in the numbers of newly diagnosed patients and patients having palliative care services and these problems should be incorporated into the risk mitigation algorithms.

Legal entity responsible for the study: The authors.

Funding: Has not received any funding.

Disclosure: All authors have declared no conflicts of interest.

https://doi.org/10.1016/j.anonc.2020.08.1788

1725P Development and validation of telematic follow-up for cancer patients during the COVID-19 outbreak

A. Pastoriño1, M.E. Negru1, A. Vigan1, F. Vaira1, A. Tognoni1, A. Ferrari1, I. Ricci1, M. Romiti1, F. Olcese1, A. Milano1, F. Cozzani1, C. Aachele1
1Medical Oncology, Ospedale Sant’Andrea, La Spezia, Italy

Background: The reorganization of oncologic follow-up was crucial to maintain oncologic care and reduce patient exposure during SARS-CoV-2 pandemic.

Methods: Patients scheduled for follow-up oncologic visits during the lockdown period (March 9th - May 4th 2020) were included in a program of telematic follow-up (TFU) developed at the Medical Oncology Unit of Sant’Andrea and San Bartolomeo Hospital in La Spezia, Italy. Eligibility for TFU was determined through a pre-screening of medical charts based on tumor type, risk of relapse, geographic accessibility and DFS. Pre-calls were made by skilled nurses to assess pts’ availability for next-day phone call and to assess availability of laboratory test and imaging results. A TFU form was conceived to collect pts’ clinical history, symptoms, body-weight, ongoing medical therapies, DFS, blood tests and imaging results (from Hospital imaging repository or acquired in the pre-call). Pts without signs/symptoms of relapse were scheduled for...
Expanding the role of medical oncologist in the management of COVID-19

L. Ghiglione1, E. Aucin2, J. Aguilar-Company3, N. Epalliard4, D. Casadevall Aguilar5,
L. Masfarre6, M. Rodriguez Castells7, M. Tagliamento8, S. Pilotto9, R. Lopez Castro10,
X. Mielgo Rubio11, C. Urbano Centella12, J.C. Lagana13, D. Garcia-Ilescas14,
M.V. Bluthgen15, T. Gorria Puga16, J.N. Minatta17, C.A. Cruz18, A. Prat19, L. Mezzquita20
1Medical Oncology, Hospital Clinic de Barcelona, Barcelona, Spain; 2Medical Oncology, Hopital European George Pompidou, Paris, France; 3Medical Oncology, Vall d’Hebron University Hospital and Institute of Oncology (WHIO), Barcelona, Spain; 4Medical Oncology Dept., Hospital del Mar, Barcelona, Spain; 5Medical Oncology, Parc Taulí Hospital Universitari, Sabadell, Spain; 6Medical Oncology, University of Genova, Genoa, Italy; 7Medical Oncology, Ospedale Borgo Roma - AOU Integrata di Verona, Verona, Italy; 8Medical Oncology, University Clinical Hospital of Valladolid, Valladolid, Spain; 9Medical Oncology, Hospital Universitari Fostación Alcorcín, Alcorcín, Madrid, Spain; 10Medical Oncology, Hospital General de Granollers, Granollers, Spain; 11Medical Oncology, Hospital Italiano de Buenos Aires, Buenos Aires, Argentina

Background: Cancer patients (pts) have been associated with severe SARS-CoV2 infection and higher mortality compared with the general population. This could be related to the limitation of therapeutic effort based on their prognosis and healthcare prioritization towards non-cancer pts. The oncologist’s role could be crucial for providing high-quality care. We aim to assess the impact of oncologists (ONC) on COVID-19 management.

Methods: Multicentre retrospective analysis of cancer pts diagnosed with COVID-19 between Mar-Apr 2020. We classified pts according to an estimated life expectancy (based on tumor/stage/line) in 3 groups: favourable group (FG) mOS >5 years (y); intermediate (IG) 1-5y and poor (PG) <1y. We studied COVID-19 management based on oncologist’s involvement: mainly-ONC vs. mainly other specialists (Other). Primary endpoint: COVID-19 30-day mortality (early-M). Secondary outcomes: intensive care unit (ICU) admission and incidence of acute respiratory distress syndrome (ARDS) and antiretroviral treatment (ART) and immunomodulatory drugs (IMD) administered.

Results: 287 pts were enrolled, median age 69 (35-98), 52% male, 67% with an active tumor (of them 76% had advanced stage). Mostly thoracic tumors (26%), followed by gastrointestinal (21%) and breast (19%). Among 170 pts under treatment, 88 (52%) received chemotherapy (CHT). By prognostic group: 49% were included in FG (<0.001). Finally, FP managed only by Other: 13% ARVt and 25% vs. 0% ImD (all p <0.001). Overall early-M rate was 27% (ONC 22% vs. Other 27%). Prognostic groups were associated with early-M: 19% (FG) vs. 31% (IG) vs. 37% (PG) (p=0.022). No significant differences regarding rate of ARDs (23% FG vs. 19% IG vs. 17% PG). The ONC group (n=18) included 4 FG and 14 IG, 94% had an advanced stage disease, 83% receive CHT and 65% had PS 2 (p=0.05 compared to Other group). In IG (ONC vs. Other): 7% vs. 2% ICUa, 100% vs. 34% ARVt and 57% vs. 7% IMD (all p<0.001). In FG (ONC vs. Other): 25% vs. 0% ICUa, 75% vs. 34% ARVt and 25% vs. 0% IMD (all p<0.001). Finally, FP managed only by Other: 13% ICUa; 33% ARVt and 13% IMD.

Conclusions: Oncologist mostly treated complex pts compared to other specialists. During COVID-19 crisis, setting prognostic groups helped to individualized therapeutic approaches, reflected by less mortality rate and no differences in terms of complications.

Legal entity responsible for the study: Alexi Prat.

Funding: Has not received any funding.

Disclosure: L. Ghiglione: Licensing/Royalties: Hiber; Licensing/Royalties: Kyowa Kirin; Licensing/ Royalties: Vitor Pharma. E. Aucin: Travel/ Accommodation/Expenses: Mundipharma; Licensing/ Royalties: Sandof Genzymes. S. Pilotto: Licensing/Royalties: AstraZeneca; Eli-Lilly; BMS; Boehringer Ingelheim; MSD; Roche. A. Prat: Research grant/Funding (institution), Licensing/Royalties: Roche; Advisory/Consultancy, Research grant/funding (institution), Licensing/Royalties: Pfizer; Novartis; Amgen; Licensing/Royalties: BMJ, Research grant/Funding (institution), Licensing/Royalties: Daiichi Sankyo; Advisory/Consultancy: Puma; Oncolytics Biotech; MSD; Advisory/Consultancy, Research grant/funding (institution): Lilly: Research grant/funding (institution), Licensing/Royalties: Nanostring technologies; Office/Board of Directors: Beast International Group (BIG); Solti’s Foundation; Acutal fronte al cancer Foundation; Solti; Research grant/funding (institution); Boehringer, Symex Europa GmbH, Medi Scienza inno, Research, Sti, Delgane, S.L.U. Ateliers Pharma. L. Mezzquita: Research grant/Funding (self), Travel/Accommodation/Expenses, Licensing/Royalties: Bristol-Meyers Squibb; Licensing/Royalties: Teconofarma; Licensing/Royalties, International Mentorship Program: Astrazeneca; Advisory/Consultancy, Travel/Accommodation/Expenses, Licensing/Royalties: Roche; Advisory/Consultancy: Roche Diagnostics; Research grant/funding (self). Boehringer Ingelheim. All other authors have declared no conflicts of interest.

https://doi.org/10.1016/j.annonc.2020.08.1790

COVID-19 pandemic: Impact on doctors in training

A.R. Farroq, S. Iqbal, N. Abdul Aziz, A. Amaasyab, T.N. O’Brien, E. Maher, M.Z. Zameer, M. Conroy, N. Peters, D. Collins

Medical Oncology Department, Cork University Hospital, Cork, Ireland

Background: The COVID-19 pandemic is a healthcare crisis leading to unprecedented impact upon healthcare services, notable morbidity and mortality of the public and healthcare professionals, significant psychological effects, and economic repercussions. Junior doctors and those in training are at the forefront of medical care for these patients. We present survey results outlining the concerns of doctors in training.

Methods: A questionnaire was developed and delivered via Survey Monkey relevant to doctors in training during the COVID-19 pandemic. The Perceived Stress Scale was included to gauge participants’ stress. The self-reported experience regarding their personal and family health as well as impact on social life was also assessed.

Results: A total of 285 participants engaged with the survey but 197 (69%) completed all answers. Almost 86% of respondents had been trained in donning and doffing personal protective equipment (PPE) and nearly 85% felt significantly confident in the process. Overall, most respondents felt somewhat prepared (60%) or well prepared (20%) to treat COVID-19 patients. However, 42% of respondents worried that their hospital would struggle, or could not cope at all, with COVID-19 patients. Nearly 91% of respondents were concerned about the availability of PPE. When asked to report their concerns, family health (86%), personal health and social life (47%) topped the list. According to the Perceived Stress Scale, the majority of respondents (62%) had moderate stress.

Conclusions: This survey is the first known effort to gauge the concerns of doctors in training in Ireland with regard to the COVID-19 pandemic. Our results show that most junior doctors were trained and relatively confident in donning and doffing PPE and managing COVID-19 patients. However, significant percentage of doctors in training worried that their hospital might run out of PPE and would struggle with COVID-19 patients. They reported concerns regarding their personal and family health as well as impact on social life. A significant finding was that a majority of junior doctors had moderate stress at baseline. A follow-up survey to gauge the stress of doctors in training after the surge of COVID-19 patients is planned.

Legal entity responsible for the study: The authors.

Funding: Has not received any funding.

Disclosure: D. Collins: Honoraria (self); Pfizer; Honoraria (self), Travel/Accommodation/Expenses: Gennab; Honoraria (self), Travel/Accommodation/Expenses: Astra Zeneca; Honoraria (self); Eli Lilly; Honoraria (self), Travel/Accommodation/Expenses: Roche; Advisory/Consultancy, Travel/Accommodation/Expenses: MSD; Advisory/Consultancy: Seattle Genetics. All other authors have declared no conflicts of interest.

https://doi.org/10.1016/j.annonc.2020.08.1791