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1749P

## COVID-19 impact and predictive factors for mortality in cancer patients

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**Background:** SARS-CoV-2 is a novel coronavirus that has been responsible for the largest pandemic in the last century: COVID-19. This disease has widely affected Spain with a high lethality in ancient patients (pts) and with comorbidities. Oncological pts were not an exception.

Methods: We evaluated the association between COVID-19 mortality and clinical/laboratory/radiological parameters in cancer pts from March to April 2020 at our institution. Past medical history and COVID-19-related parameters (symptoms, laboratory/x-ray findings and treatments) were retrospectively collected. Univariate analysis (UA) has been done using Fisher exact and U-Mann-Withney test for qualitative and quantitative variables, respectively. Multivariant analysis (MA) has been done using logistic regression.

Results: Forty three hospitalized pts were diagnosed with COVID-19; 30 pts (69.8%) were symptomatic on admission and 13 pts (30.2%) were hospital-acquired cases. Median age was 68.8  $\pm$  7.8 years. Most part of the pts had gastrointestinal (GI) (13; 30.2%), thoracic (Tx) (12; 27.9%) and breast (6; 14%) cancer. A higher prevalence of 37 tumours compared to our new pts prevalence is observed (9%). Fever was the most common symptom (27; 62.8%) and bilateral pneumonia was observed in 24 pts (55.8%). SARS-Co-V-2 PCR was positive in 34 pts (79.1%). Hydroxychloroquine was administered in 35 pts (81.4%), steroids and antiretrovirals in 19 pts (44.1%) and tocilizumab in 12 pts (27.9%). Mortality rate due to COVID-19 was 30.23% (13 pts) and 8 pts could resume oncological treatment. Hypertension (HTA) and previous dily steroids given during last month before admission; as well as performance status, fever, Curb-65, SOFA score and D-Dimer (DD) at admission were associated with COVID-19 mortality in UA. Similarly, high flow oxygen requirements during hospitalization and DD at 72 hours are predictors of mortality. HTA [OR: 8.3 (1-5-70.1)], steroids [OR: 10.7 (1.3 – 143.8)] and fever [OR: 0.09 (0.01 – 0.55)]were also associated in MA

Conclusions: COVID-19 showed a relative higher incidence in pts with Tx and GI tumours. Some clinical and laboratory parameters were found to be predictive factors for mortality as previously reported in non-cancer pts. Further investigations with larger number of pts are needed.

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Clinical course and outcome of COVID-19 in cancer patients: Early results from the "onCOVID-19" study

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**Background:** Cancer patients are considered at higher risk of SARS-CoV-2 infection and more serious COVID-19 illness compared to the general population. We present the early results of the "onCOVID-19" study exploring the clinical course and outcomes of SARS-CoV-2 infection in patients affected by cancer.

Methods: In this observational study, we collected clinical data from patients referred to our institution with histologically confirmed diagnosis of solid cancer and COVID-19 from Feb 1 to May 20,2020. COVID-19 diagnosis was laboratory or radiologically confirmed or clinically suspected for suggestive symptoms, including fever (>37,5°C) and/or respiratory tract symptoms. Univariate and multivariate analyses were performed to explore the risk factors associated with severe events

defined as hospitalisation, admission to an intensive care unit, mechanical ventilation or death.

Results: Of the 64 patients included, 35 had available clinical data on medical and cancer history required for the analysis. Median age was 63 (47-86) years. Male were 22 (63%) and current or former smokers were 25 (76%). Lung was the most frequent site of primary tumor (15, 43%) or metastases (13, 37%). Out 26 (74%) patients on active anti-tumor treatment, 6 (23%) received immune checkpoint inhibitors (ICI). Most common symptoms were fever (40%), shortness of breath (34%) and cough (23%); lymphopenia (<1000/mm3) was found in 5/15 (33%) tested patients. The diagnosis of COVID-19 was only clinically suspected in 2 (6%) cases and confirmed by RT-PCR or imaging (ground glass opacity and/or patchy consolidation) in 11 (31%) and 31 (88%) patients, respectively. An antimicrobial treatment was administered in 19 patients. Eleven (31%) patients had severe events, death occurred in 7 (20%) cases. Higher risk for developing severe events was associated with active treatment with ICI (RR 4.0.3, 95%CI 1.8-8.9, p=0.007) and lymphopenia (RR 4.0, 95%CI 1.1-14, p=0.007).

**Conclusions:** We confirmed the vulnerability of cancer patients to COVID-19. Although the sample size was small, treatment with ICI and lymphopenia seem to be risk factors for death and severe events. Screening cancer patients for infection is advisable, in particular before starting immunotherapy or in case of lymphopenia.

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1751P

Lessons from a pandemic: An audit of acute medical oncology admissions during SARS-CoV-2 outbreak

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Background: In December 2019 a cluster of pneumonias, later identified as SARS-CoV-2 (CoV), were reported in China. The first case in Ireland was reported February 29th 2020. The first community acquired case in Ireland was reported March 5th. The World Health Organisation declared CoV a pandemic March 11th. Lockdown measures were implemented in Ireland March 27th. Cork University Hospital is a large acute hospital and a tertiary referral center for cancer care. We undertook an audit of unscheduled medical oncology admissions over a 3 month period with a view to assess the impact of CoV on the centre.

Methods: From 1st February to 30th April we audited unscheduled medical oncology admissions. Parameters included presenting time, location and complaint, CoV status and average length of hospital stay (aLOS). Data was organised into 3 phases: four week period prior to a confirmed case of CoV in Ireland (phase I), four week period from confirmed case to lockdown implementation (phase 2) and four week period during lockdown (phase 3). After the outbreak of CoV we developed a separate medical oncology assessment facility (AOS) with an admission pathway. A hospital CoV pathway (CoVo) for potential CoV cases was also implemented.

Results: A total of 162 medical oncology patients had unscheduled admissions during this period. Over half (57%) were receiving anticancer systemic treatment. The most common presenting complaints were pain (21%), pyrexia (17%) and dyspnoea (14%). The underlying diagnosis was cancer-related in 51%, treatment-related toxicity in 10% and non-cancer related in 39%. One patient was CoV positive. Unscheduled hospital admissions, source of admission and aLOS are outlined in the Table.

Table: 1751P							
	Unscheduled hospital admissions						aLOS
	Total	ED	Outpatient	AOS	CoVp	Other	
phase I	67	52 (78%)	6	6	0	3	15
phase II	37	20 (54%)	1	10	4	2	5
phase III	58	27 (47%)	4	16	4	6	3

Conclusions: A reduction in aLOS and ED admissions was paralleled by increasing use of alternative pathways. Processes which facilitate urgent assessment of oncology patients in specialized units avoid ED attendance and accelerate discharge planning in the care of cancer patients in the face of a pandemic and beyond.

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