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ADJUSTING CARE FOR OLDER CANCER PATIENTS DURING THE COVID-19 OUTBREAK: the SIOG Recommendations

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Short resume:

The COVID-19 pandemic poses several challenges and distresses primarily senior adults, the age-group predominantly affected by cancer.

A careful evaluation of each elderly patient by means of a Geriatric Assessment is mandatory, in order to avoid over-treating frail and vulnerable patients, while not under-treating fit individuals.

Several geriatric-focused issues have been recognized, which might affect the senior cancer patient beyond the malignant tumour: feeling of estrangement due to limited access to friends/family; decline in communication and comprehension from wearing masks and facial shield, more particularly so for hearing-impaired patients who rely on lip reading and nonverbal cues; increased dependency on others to provide basic needs such as drugs, food and home supplies.

An expert panel established by SIOG has been set in place to develop a consensus and make recommendations on aspects of cancer care in this age group.

Key messages:

1. The senior adults are mostly distressed by the COVID-19 pandemic besides



bearing the highest burden of malignant disease (one in two cancer is detected after age 65).

- 2. It is possible to prioritise those patients demanding active oncological treatment by means of Geriatric Assessment tools.
- 3. Advantages and drawbacks of active cancer treatments should be tailored according to a holistic and patient-centred approach.

The COVID-19 outbreak has been posing numerous challenges, affecting people from all over the world, ethnicity, literacy, religious orientation, but there is no doubt that senior adults are the most severely affected group. Amongst them are numerous cancer patients, since more than one in two malignant tumours affect people aged 65-year and above.

COVID-19 represents another competing risk factor to take into account when undertaking therapeutic decisions for senior adults with cancer. The presence of chronic conditions such as cardiovascular disease, diabetes, chronic respiratory disease, chronic renal impairment, and cancer present worse outcomes, particularly for those patients with 3 or more comorbidities. In many older cancer patients where management could be challenging, the risks of morbidity and mortality from acquiring COVID-19 must be considered when assessing risks and benefits of the decision to undertake cancer treatment. During the pandemic it becomes even more imperative that such approach is followed to avoid the risk of over- or under-treatment and minimise the risk of adopting an ageist approach.

adopting an ageist approach. To this purpose the International Society of Geriatric Oncology (SIOG) has established a panel of experts with the aim of developing a consensus and making recommendations on numerous aspects of cancer care specific to this age group ⁽¹⁾.

Older age and cancer diagnosis are predictors of negative outcomes of the COVID-19 infection. In this setting a careful Geriatric Assessment (GA) is particularly valuable to assist decision-making. GA may assist estimating physiologic reserve and adaptive capability, assessing riskbenefits of either providing or temporarily withholding treatments, and determining patient preference to help inform treatment decisions. In a resource-constraint setting during a pandemic, frailty screening tools may be administered remotely to identify patients requiring a more Comprehensive GA.

Therapeutic decisions should favour the most effective and less invasive approach with the lowest risk of side effects. In selected cases, this might require deferring or omitting surgery, radiotherapy or chemo/immunotherapy especially when



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benefits are marginal and different therapeutic options are available, and may be safer.

Further research is needed to expand our knowledge on how best to manage cancer in older adults. The pandemic has produced barriers: efforts should be made to ensure prospective data is collected to elucidate the outcomes of COVID-19 in this age group. Local and national health organizations attempted to minimize viral transmissions and allocate resources for primary and secondary prevention, including home confinement and social distancing of cancer patients, limiting their hospital visits when the risk of acquiring COVID-19 is high, and reducing iatrogenic immunosuppression and treatment-related toxicities.

Several geriatric-focused issues have been identified as a result of an imposed quarantine and social distancing; these include (a) feeling of estrangement, loneliness and neglect due to limited access to news or information, friends and family, particularly when access to digital technology is lacking; (b) decline in communication and comprehension not only due to isolation but also from wearing masks and facial shield, more particularly so for hearing-impaired patients who rely on lip reading and non-verbal cues; (c) loss of autonomy and ensuing dependency on others to satisfy basic needs such as drugs supplying, food and other home provisions due to travel restrictions or lack of access to transportation. On the other hand, community support for seniors such as cleaning, shopping and home maintenance to aid them cope with daily life have also been disrupted. Therefore, several disabilities become a major handicap, which may lead to an increased risk of institutionalisation. Institutionalised patients, such as those in the nursing care facility are at higher risk of acquiring COVID-19 infection, increased feeling of abandonment, as well as mental health problems^[2,3].

The impact of social isolation as a result of recommendations on physical distancing, excessive risk of delirium with limitations in its management, and decisions regarding anticancer treatment, are important issues to assess and pro-actively address.

The risk of delirium is high as well as underestimated: when the current status of hospitals and other healthcare settings are becoming more "deliriogenic" and visit times are restricted, staff members are required to wear personal protective equipment (PPEs); patient interaction is also minimized to avoid exposure ^[4]. In these times, it is paramount to evaluate and stratify the risk of delirium in patients who are candidates for chemotherapy and surgery since both treatments can become high risk procedures.

Decision-making should be patient-centred, taking into account the potential risk of pursuing, delaying or omitting surgery, the most curative treatment strategy. It has been repeatedly proven how ASA and ECOG-Karnofsky are unsatisfactory in predicting treatment outcomes.

Aside patients' fitness and the number/ severity of comorbidities which may influence the postoperative course, healthcarers should consider tumour related factors as well as the presence of cancerrelated symptoms, besides risks associated to the operation itself.

Most elective surgical procedures can be delayed safely, in view of reducing the risk of COVID-19 infection. In the case of cancer surgery, the definition of "elective" is entirely dependent on the biology of the disease and the symptoms generated by the tumour. There is no doubt that those procedures aiming for a rapid relief of symptoms (e.g. obstructions of the GI tube) or to minimize neurological complications (e.g. spinal metastases and hip erosions due to secondarisms) should be prioritised. On the other hand, surgical treatment of non-invasive tumours (e.g. ductal in-situ carcinoma of the breast) can be delayed since these are unlikely to impact on survival. The risk of tumour progression with a delayed radical surgery should also be balanced against the availability of resources, including operating theatres that may been converted in Intensive Care Units (ICUs), the local ICU capacity, the number of available anaesthetists, the risk of surgical complications and the expected time to recovery. There is evidence that operating older patients with a confirmed COVID-19 infection exposes them to a higher 30-day risk of death⁽⁵⁾.

On the other hand, there is a window of opportunity which allows considering neoadjuvant and less toxic treatments such as endocrine therapy or radiotherapy, as a mean to delay surgery in selected cases: under certain circumstances, the omission of surgery may be appropriate in case the impact on symptoms and survival is minimal, or when a safe and effective alternative therapeutic option is available. This is the case of primary endocrine therapy for older patients with early-stage ER-positive, HER2-negative breast cancer.

In a similar way, the use of radiation therapy in older patients should be prioritised according to the expected benefits and the tumour biology, within the context of patients' fitness and preference. In the older age group, travelling constraints, daily hospital visits and patients' concerns regarding exposure may represent significant challenges.

Radiotherapy is a valid treatment however radiation dosage and fractionation should be optimised and adapted to the pandemic context. Hypofractionated regimens and shorter schedules may be preferable in the curative setting.

Conversely, a shorter course of adjuvant RT (26 Gy in 5 fractions) is also noninferior to a standard regimen of 40 Gy in 15 fractions for patients with early-stage breast cancer ^[6] and could be considered as an alternative option in order to minimise the risk of exposing older patients to the viral infection. Modest hypofractionation could also be considered for early prostate cancer patients.

In the palliative setting, patients should be offered the smallest number of fractions to minimise the number of visits to hospital and consequently the risk of exposure ⁽⁶⁾.

RT should be delayed in the absence of any significant impact on cancer outcomes. On the other hand, in case of curative intent or rapidly progressive disease, the risks of delaying RT will outweigh the risks of COVID-19 exposure and infection. Patients already undergoing RT should be offered a discussion about the risks and benefits of continuing it based on individual goals of care.

The potential tumour control offered by systemic treatment is unchanged during a pandemic, whereas risks may be increased, especially for those regimens causing myelosuppression or requiring frequent visits to hospital therefore increased infection exposure. The balance of harms and benefits remains uncertain as there is no evidence to suggest changing or withholding it. Therefore, decision-making should be individualised on the tumour biology, the type of therapy, the patients' general health status and his/her very own preferences.

Geriatric Assessment has proven reliable in predicting toxicity in older patients; its implementation is particularly appropriate in the context of the ongoing COVID-19 pandemic. The Cancer and Aging Research Group (CARG) model takes into account age, type of cancer, the proposed chemotherapy regimen, renal and hematologic function, hearing, along with GA domains such as ability to take medications, physical activity and social activity ⁽⁷⁾. The Chemotherapy Risk Assessment Scale for High age (CRASH) is based on the specific chemotherapy regimen being considered as well as laboratory values (creatinine, albumin, haemoglobin, lactate dehydrogenase, liver function tests) and assessments of

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functional, mental, and nutritional status^[8].

In the curative setting, chemotherapy should be considered when appropriate and in the presence of a clear survival benefit. Whenever possible, a shorter schedule should be preferred. In the palliative setting, shared decision-making should take into account the hazards of worsening symptoms and functional status, which could lead to missing the opportunity to treat. After attaining ongoing disease remission, discontinuing chemotherapy may be an option, especially if alternative non-myelosuppressive agents are available, such as endocrine therapy for HR-positive breast cancer patients.

Chemotherapy regimens with less frequent dosing should be preferred to minimise the need for hospital visits. When available, oral agents should be favoured over intravenous treatments: capecitabine could replace fluorouracil in the management of colorectal malignancies without compromising outcomes. Primary prophylaxis with granulocyte colonystimulating factors is also advisable for patients receiving cytotoxic drugs in view of an increased risk of myelosuppression in the older age group.

Adjuvant chemotherapy can be delayed within the accepted timing for each tumour type: patients with colorectal or lung cancer can have their chemotherapy safely postponed for up to 8 weeks ^[9,10] and for those with breast cancer for up to 12 weeks after surgery ^[11].

Chronological age alone should not preclude any oncologic treatment in older adults. On the other hand, such decision should consider individual circumstances which are likely to influence their impact on survival or symptom control, including life expectancy, comorbidities and tumour biology, prioritizing the patients' preferences.

COVID-19 is an emerging and rapidly evolving condition that warrants personalised care as suggested by careful GA and depending on the disease prevalence together with the penetrance of the pandemic. SIOG has outlined the urgent need to protect vulnerable patients and mitigate the projected negative outcomes in this age group. This is unlikely to be the last pandemic that mankind will encounter; it is therefore imperative that we take this unique opportunity to learn and design tailored management for both present and future use. It should also be acknowledged previously that the mentioned recommendations may lead to scattered implementation, depending on the stage of the pandemic and the distribution of the virus. Whilst data is still emerging and follow-up of ongoing trials is too short to allow robust conclusions, the SIOG Working Group has developed a number of recommendations on the management of older adults with cancer which are outlined in the full article recently published ⁽¹⁾.

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