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Letter from Switzerland

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| Corresponding Author: | Thomas Zilli, M.D. Geneva University Hospital 1211 Geneva 14, SWITZERLAND |
| First Author: | Verane Achard, M.D., PhD |
| Order of Authors: | Verane Achard, M.D., PhD Pelagia Tsoutsou, M.D. Thomas Zilli |

Anthony Zietman, M.D., Editor-in-Chief
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Geneva, March 12th, 2020

Dear Dr. Zietman,

On behalf of all coauthors, I am submitting to your attention the following editorial to be considered for publication in your Journal. With the number of cases of COVID-19 surpassing 100 000 worldwide, the WHO reminds us to “stop, contain, control, delay and reduce the impact of this virus at every opportunity”. Reducing the impact of this epidemic on cancer patient care is the point of this editorial, addressing the special responsibility that radiation-oncologists shall bear in this epidemic period.

We have no potential conflict of interest to declare.

Yours sincerely,

Thomas ZILLI, M.D.

Corresponding author:

Thomas ZILLI

Radiation Oncology Department

Geneva University Hospital

CH-1211 Geneva 14

SWITZERLAND

Tel: +41 22 38 27 090

Fax: +41 22 38 27 117

Email: Thomas.Zilli@hcuge.ch

Letter from Switzerland

Radiotherapy in the time of the Coronavirus pandemic: when less is better

Vérane Achard, M.D., PhD, Pelagia Tsoutsou, M.D. and Thomas Zilli, M.D.,*

** Department of Radiation Oncology, Geneva University Hospital, Geneva, Switzerland*

Corresponding author:
Thomas ZILLI, M.D.
Radiation Oncology Department
Geneva University Hospital
CH-1211 Geneva 14, SWITZERLAND
Tel: +41 22 38 27 090
Fax: +41 22 38 27 117
Email: Thomas.Zilli@hcuge.ch

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The outbreak of Coronavirus disease 2019 (COVID-19) in December 2019 has been declared a public health emergency by World Health Organization (WHO). Originating from China, the epidemic has spread to 115 countries in the world with more than 100 000 cases of COVID-19 that have been reported, including more than 4000 deaths (1). After China, the epidemic has struck hardest in Italy with 827 deaths in few weeks, leading the Italian government to extend emergency Coronavirus measures, including travel restrictions and a ban on public gatherings to the entire country in an effort to contain the epidemic. On March 11th 2020, the WHO declares the Coronavirus outbreak a pandemic.

In addition to the challenge of containing the spread of COVID-19, the hospital management of infected patients remains a major burden for the health care system. Though not in the front line in fighting the disease, radiation oncologists are nevertheless directly impacted by this situation. First, radiation oncology departments, as other hospital departments, have to face staff shortage due to quarantine holding and requisitioning. Second, cancer patients treated in radiation oncology departments are often frail and immunocompromised and at risk of being severely affected if infected by COVID-19. The more time they spend in hospitals and public environment the more they are likely to be infected and/or to spread COVID-19.

The “primum non nocere” of the Hippocratic Oath becomes more relevant than ever in this context of pandemic and leads us to another level of understanding of this principle. An understanding that is forcing us to rethink and adapt our current practices of treating cancer patients with the provision on high quality care always kept in mind.

Certainly, prioritizing radiotherapy treatments and postponing non-essential procedures and/or visits are crucial for any radiation oncologist to deal with COVID-19 pandemic.

At the same time, rethinking our institutional radiotherapy (RT) fractionations by implementing hypofractionated schedules may represent, when feasible, the essential paradigm to decrease the access of cancer patients to the hospital and limit the potential diffusion of COVID-19. Although hypofractionation has been validated in many tumor locations, its use, for several reasons

1 and country-based differences, is often far to be considered a standard. For breast cancer, in some
2 countries less than 15% of the postmastectomy and regional irradiations are delivered with
3 hypofractionation (2), unlike in the UK and the Netherlands where moderate hypofractionated RT is
4 currently used for regional treatments (3). In rectal cancer, despite the evidence coming from
5 randomized trials (4), short-course RT is clearly underproposed in the neoadjuvant setting compared
6 to long-course chemo-RT protocols (5,6). As for prostate cancer, all the level 1 evidence converges
7 nowadays on the equivalence of moderate hypofractionation and standard fractionation (7).
8 Moreover, results of extreme hypofractionated schedules are very promising. Last but not least, single
9 fraction RT is a validated option for patients with symptomatic uncomplicated bone metastases (8)
10 that unfortunately remains internationally underutilized (9).

21 COVID-19 is an emerging infection disease of global public health concern. Radiation
22 oncologists, as part of health-care workers community, are directly involved in the fight against the
23 viral spread. They face however their own challenge which is to minimize the epidemic impact on
24 cancer patients' treatment. Use of practical measures to mitigate the impact of treatment
25 interruptions (10) but also wider implementation of hypofractionated schedules in the clinical practice
26 can make our discipline adaptable in exceptional times such as these. Let us think about that and act
27 accordingly. Probably, it is time to consider that less is better.

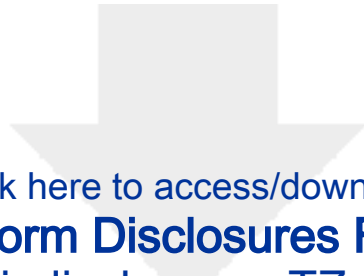
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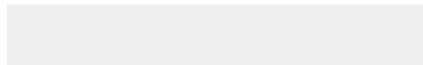


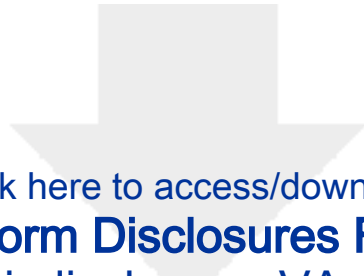
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