Universal Health Coverage for Cancer Care in the COVID-19 Age

Challenges and Outlook for Radiation Therapy in Japan

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■ Objectives of the Project:

In order to study the implementation of next-generation health care setting for the realization of universal health coverage (UHC) for cancer care in the age of COVID-19, we will investigate the actual conditions (impediments) for intensity-modulated radiation therapy (IMRT) in designated cancer care hospitals.

As a member of the Union for International Cancer Control (UICC), the Asia Cancer Forum (ACF) has been continually engaged in policy recommendation activities and advocacy over the course of many years, holding conferences (http://www.jsco.or.jp/jpn/index/page/id/155) to seek ways to resolve challenges to achieving UHC in cancer care. Through this network we will conduct domestic and international interviews and hold expert meetings, compiling a report that will set out the groundwork to enable discussions on next-generation health care setting, and disseminate policy recommendations at a global level on next-generation radiation therapy treatment.

■ Background to the Project and Recognition of the Issues by Asia Cancer Forum

While the recent disruption in the field of cancer care due to the COVID-19-related crisis is considered to be a manifestation of the challenges facing existing health care systems, it is necessary to begin to consider the implementation of the next generation of health care setting that improves access to care and improves the quality and lowers the cost of care with limited health care resources, with a view to treating patients with advanced stage disease, numbers of whom are expected to increase due to interruptions in diagnosis and treatment. As a measure towards this aim, as discussed at UICC, radiotherapy, which does not require a hospital bed or respiratory equipment and does not affect the patient's immunity to any great extent, has been attracting attention. However, radiotherapy in Japan is not widely used at treatment sites compared to other countries. Therefore, this study aims to identify the actual status of radiotherapy in Japan as a way to solve the problems to realize UHC in cancer care. In particular, although designated cancer hospitals have been established in a comprehensive network around the country to serve as hubs for access to medical care, in fact the proportion of these hospitals that have facilities capable of offering IMRT, a high-precision form of radiation therapy, stands at only around 50%, and the utilization rate of IMRT in the number of radiotherapy treatments is as low as around 10%. So what is causing the bottleneck to dissemination of IMRT? By carefully tracing the impediments to the implementation of IMRT, we consider it possible to identify the challenges of cancer care in Japan, where, despite the talk of equalization, there are large regional disparities and true UHC for cancer care has yet to

be achieved. Consideration of a cancer treatment delivery system that optimizes medical resources can be expected to contribute to the realization of UHC for cancer care not only in Japan, but also in Asia, where Japan should take the lead.

In addition, media reports on radiation therapy provided to celebrities who have died during the COVID-19 crisis have revealed the fact that radiation therapy in Japan is not accurately understood not only by the general public but also by medical professionals. For the construction of the next-generation medical system, it is necessary to understand from a scientific and sociological perspective that the lack of progress concerning social understanding of the nature of radiation therapy is a unique challenge for Japan.

Medical personnel who are the essential driving force for the realization of UHC are anticipated to be under considerable pressure in the future in the COVID-19 age. What is more, at facilities where radiation therapy is being provided, new trends that adopt data-driven insights into the medical personnel workforce model have emerged, and it is now necessary to collect information pertaining to these emerging trends. In anticipation of a global workforce shortage, there are also some budding systems, such as highly flexible medical workforce work-life balance systems that have reduced on-site staffing requirements and provided effective care through cloud-based remote systems. With recent advances in radiotherapy technology and software, the use of telemedicine can transform care. It is time to give strong consideration to the growing demand for radiotherapy and how to support radiotherapy sites with new solutions.

In emerging countries that do not have the infrastructure in place to deal with the COVID-19 emergency, there is also the possibility of a leapfrogging phenomenon, whereby a new system could leapfrog the technological progress made by developed countries and spread at once. Utilizing the UICC network and also in collaboration with the IAEA's Program of Action for Cancer Therapy (PACT), parallel surveys of the current situation in Asian countries will be implemented and this project aims to address this issue as a pressing global challenge and to set out a path to sustainable solutions.

- Research Topics
  - Fact-finding survey into radiation therapy in Japan

    (In the current fiscal year a fact-finding survey will be implemented on the dissemination of IMRT at designated cancer hospitals in Japan.)
  - Analysis of the challenges facing social acceptance of radiation therapy in Japan
  - Collection of information on international trends in the development of next-generation radiology systems and medical personnel
  - Survey of the current status of radiotherapy in Asia and comparisons with challenges in Japan (survey in collaboration with UICC networks and the Program of Action for Cancer Therapy (PACT))

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■ Sponsor:

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■ Commissioned Organization:

Asia Cancer Forum: http://www.asiacancerforum.org/ja/

Asia Cancer Forum aims to contribute to the improvement of cancer care in Asia by creating an interdisciplinary international collaboration network for the collection and utilization of cancer-related information, and engaging in projects related to activities to promoting cancer on the global health agenda. In order to achieve these aims, Asia Cancer Forum is engaged in the following initiatives.

(1) Holding of the Asia Cancer Forum (international meeting); (2) Educational activities at universities and research institutions; (3) Cancer prevention educational activities in school health-related classes; (4) Multinational cancer awareness surveys and analysis; (5) Construction of cancer information sharing systems (for education/awareness-raising purposes); (6) Projects that are ancillary or related to projects detailed in (1) to (5) above.

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