Adapting Radiation Oncology Department Workflow during the COVID-19 Pandemic: Perspectives from Two Tertiary Centers in the Philippines

Thomas Vincent T. Vergara, Miriam Joy C. Calaguas, Manuel Martin L. Lopez, Juan Martin M. Magsanoc, Angela Pena-Camacho, Angela Gaerlan-Tagle, Caissa Elvira Tangco-Abao

St. Luke's Medical Center
Quezon City · Global City

Introduction

We present the goals and elements of department workflow and policy formulation that were implemented during the early phase of the COVID-19 pandemic in St. Luke's Medical Center (SLMC), a private healthcare institution operating two large tertiary hospitals in the Philippines. Both hospitals provide basic and advanced radiotherapy services and are equipped with a total of six linear accelerators, two CT simulators, and two brachytherapy units.

Overall Goals of Policy Development During the COVID-19 Pandemic

(a) ensure effective, safe and accurate delivery of radiation treatment throughout the time of the pandemic
(b) mitigate the risk of infection among patients and staff
(c) maintain lines of communication with patients and other members of the oncology healthcare team.

	Description	Examples
Priority A	All emergency and urgent patients where alternative management to radiotherapy is not possible. Patients with rapidly progressing, potentially curable treatments.	SVC syndrome Spinal cord compression not amenable to surgery Uncontrollable bleeding Malignant brain tumors Aggressive lymphomas Acute pain crisis[b] Cervical Cancer Anal Cancer Head and Neck Cancer
Priority B	All other patient with cancer needing radiation therapy	Adjuvant breast/Post-mastectomy RT Prostate cancer
Priority C	Benign, slowly progressive tumors, especially if asymptomatic	Benign Meningioma Pituitary Adenoma

Table. Three Levels of Patient Prioritization[a]
[a]Modified from the Cancer Care Ontario - Pandemic Planning Clinical Guideline for Patients with Cancer
[b]Consider deferring RT and temporarily managing patients with bone pain with adjustments to pain medications

Elements of Workflow and Policy Development During the COVID-19 Pandemic

Pandemic Working Group

A working group was established to oversee the implementation of department protocol, evaluate all new cases referred for radiation therapy, provide clinical recommendations regarding patient prioritization, and assess the safety and feasibility of postponing radiation treatment and the utilization of hypo-fractionated radiotherapy regimens when possible.

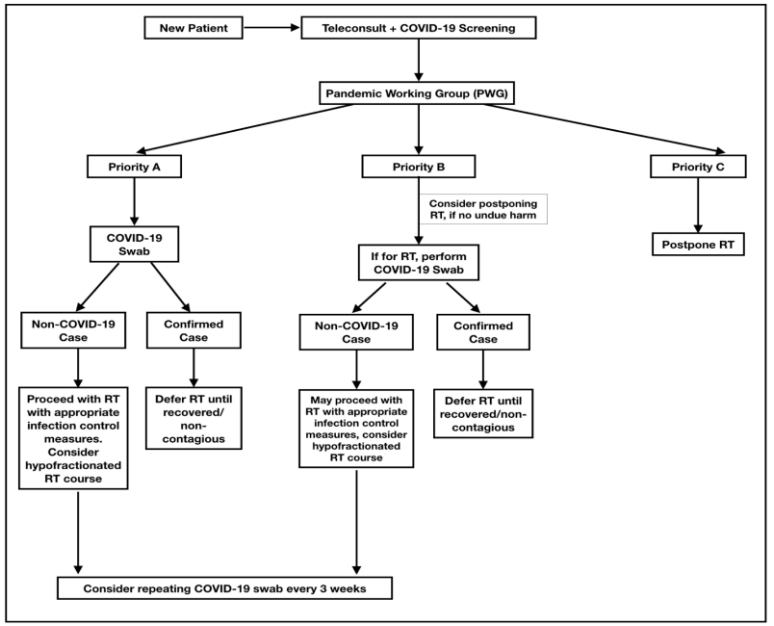

Figure. Initial department workflow implemented in SLMC Department of Radiation Oncology during the first surge of the COVID 19 pandemic in the Philippines. The algorithm has undergone continuing modifications in light of our evolving knowledge and experience of RT delivery during the pandemic

Conclusion

The current global pandemic has dramatically affected the practice of radiation oncology in our institution and the world at large, forcing us to rapidly adapt to a volatile situation. Our institution has adopted mechanisms in order to anticipate and prevent potential problems that could force our centers to severely restrict or halt operations, with ultimate the goal of continuing the delivery of life-saving and quality-of-life-improving radiotherapy services, while at the same time protecting our staff and patients.