



AN OVERVIEW OF NOVALIS CERTIFIED PROGRAM IN A JAPANESE HOSPITAL

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PURPOSE

The Novalis Standard is a certified program which specifies best practice in SRS and SBRT. Kurashiki Central Hospital (KCH) is the second center that has received a certification from the Novalis Standard in Japan. We presented an overview of the Novalis Standard Certification in our hospital.

MATERIALS AND METHODS

- KCH was established in 1923 and is contributing to health care in the community of Japan.
- We maintain high quality and safe medical care system with worldwide standard and are now officially accredited by Joint Commission International.
- The hospital has approximately 3000 staffs, including 490 physicians of 26 departments. Among these staffs, 5 oncologists, 5 medical physicists (4 of 5 are working as radiation therapists), 4 nurses, and 12 radiation therapists engage in radiation therapy. In 2017, approximately 850 new radiotherapy patients including around 70 SRS/SBRT patients were treated, and the patients are increasing.
- We have three machines: CLINAC 21EX, CLINAC iX, and TrueBeam STx (Varian). SRS/SBRT are provided using TrueBeam STx with Novalis Radiosurgery (BRAINLAB).
- Brain SRS is performed using a frameless mask system and lung or liver SBRT using a custom immobilization system. SBRT requires motion management strategies such as breath-hold, gating, and motion encompassing techniques using the RPM system (Varian) and inserted gold markers.

RESULTS

- The Auditors summarized;
 - The equipment, commissioning, machine QA and patient QA followed the guidelines.
 - The procedures were well documented.
 - One required action in chart review and six recommendations in staff training, the quality management program, and the QA procedures of equipment/systems were pointed out.
- Table 1 shows the requirements for the Novalis Standard and the Japan Council of Quality Health Care (JQ). The Novalis Standard is more clearly defined about acceptance testing, commissioning and quality management program, compared with the JQ.

Table 1
The requirements for the Novalis Standard and Japan Council of quality Health Care (JQ)

REQUIREMENTS	NOVALIS STANDARD	JQ
Organization	•	•
Infrastructure	•	•
Policies and Procedures	•	•
Staffing	•	•
Training and Credentialing	•	•
Equipment	•	•
Acceptance Testing	•	x
Absolute Calibration	•	•
Systems Commissioning	•	x
Dose Calculation algorithms	•	x
Quality Management Program	•	x
Equipment Quality Assurance	•	•
Patient Specific Quality Assurance	•	•

CONCLUSIONS

The Novalis Standard is a unique international peer review program that can assess the quality of SRS/SBRT and its safety. The certified program allowed improvement of staff skill specializing in SRS/SBRT and well-documentation of conference and training records in radiotherapy. Our results suggest that institutions which implement SRS/SBRT would benefit from the Novalis Standard program to ensure the treatment delivery with highest standard.