



SCHOOL

Image-Guided Radiotherapy and Chemotherapy in Gynaecological Cancer: Focus on MRI-Based Adaptive Brachytherapy

12-16 October 2019, Cluj – Romania

Course directors:

- Richard Pötter, *Radiation Oncologist, Medical University Hospital, Vienna (Austria)*
- Kari Tanderup, *Medical Physicist, Aarhus University Hospital, Aarhus (Denmark)*

As a radiation oncologist and a medical physicist, we have been performing gynaecological brachytherapy for approximately 20 years at the Dr Leon-Richard Oncology Centre in Moncton, Canada. Our technique transitioned from low dose rate brachytherapy with 2D imaging to high dose rate with 3D CT-based imaging following our participation in the 2008 gynaecological brachytherapy course in London, UK that was arranged by the Groupe Européen de Curiethérapie (GEC) and the European Society for Radiotherapy and Oncology (ESTRO).

However, at the time, we were not ready to implement interstitial brachytherapy for cervical cancer, and access to magnetic resonance (MR) imaging was very limited. Now, like many centres in Canada, we are looking to improve our brachytherapy procedure following the encouraging results from the EMBRACE studies, which were initiated in 2008 by the GEC ESTRO gyn network to evaluate image-guided radiotherapy in several projects, some of which are still ongoing. We chose to attend this year's edition of the course to start the transition to MRI-guided, interstitial brachytherapy for cervical cancers.

The breakout sessions for physicians allowed ample time to contour cases. Targeted and pertinent tips and tricks were very useful to aid in achieving a standardised contouring approach. The course instructors were friendly, welcoming and concise in their explanations. The physics sessions were also very useful. These provided helpful tips on applicator reconstruction of MR images and, most importantly, on the planning of interstitial cervical cases.

Contrary to the 2008 edition of the course, the course in Cluj was much more oriented towards practical information on how to implement both an intensity modulated radiotherapy (IMRT) protocol for the external beam portion of the treatment plan, and an MRI-based adaptive brachytherapy protocol. Many aspects of the techniques for external beam and brachytherapy, such as target definitions, contouring and planning objectives, have been clarified since 2008. Comparatively, this edition of the course provides a clearer road map to implementing these advanced techniques.

We particularly enjoyed the social event at a wonderful nearby indoor venue after a short walk through the large city park. There we were greeted by reception staff and teachers and offered delicious food and beverages, a traditional dance performance and then dance music for all to enjoy.

We found this focused course thorough, conducive to learning and practical for implementation. It also proved to offer the opportunity for a fabulous social gathering to discover and discuss various realities and treatment approaches with new-found colleagues from many parts of the world. We would certainly recommend this course to any centre that is considering implementing advanced external beam radiotherapy (EBRT) and image-guided adaptive brachytherapy (IGABT) for cervical cancer.



Santo Filice

Radiation oncologist
Dr Leon-Richard Oncology Centre
Moncton, CANADA
Email: santo.filice@vitalitenb.ca



Clément Arsenault

Chief physicist
Dr Leon-Richard Oncology Centre
Moncton, CANADA
Email: clement.arsenault@vitalitenb.ca

