SCHOOL

Course Report

Image-Guided Radiotherapy and Chemotherapy in Gynaecological Cancer: Focus on MRI-based Adaptive Brachytherapy for Cervical Cancer

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Course directors:

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From a clinical radiation oncologist's perspective Could you please briefly introduce yourself?

My name is Caroline Karpowitz, and I currently work as a clinical radiation oncologist at the University Hospital Carl Gustav Carus Dresden, Germany (Department of Radiotherapy and Radiation Oncology).

Why did you choose to attend this course?

I had already attended this course in 2018 in Madrid and met most of the European SocieTy for Radiotherapy and Oncology (ESTRO) teachers there. My main motivation this year was to refresh and improve my skills in contouring according to the Groupe Européen de Curiethérapie (GEC)-ESTRO recommendations and the International Commission on Radiation Units and Measurements (ICRU) 89-report. I also wanted to be updated in the treatment of cervical cancer, and to improve the standards at my institution to take into account state-of-the-art image guidance techniques for external beam radiotherapy (EBRT) and brachytherapy.

What aspects of the course were the most interesting and why?

The course was comprehensive in dealing with all aspects of 3D-image-based EBRT and brachytherapy that were focused on cervical cancer. It considered all aspects from theoretical principles and treatment planning through plan evaluation and reporting to practical implementation and logistics.

The course consisted of interactive live webinars, well-chosen mandatory lectures for self-study before the next live webinar, additional material and homework on contouring in two clinical cases (EBRT and brachytherapy treatments for cervical cancer). It provided enough theoretical and practical material to meet participants' wishes, whether in terms of basic knowledge or additional in-depth information.

Most interesting to me were the lectures and practical exercises about adaptive target concepts that were based on magnetic resonance imaging (MRI), such as gross tumour volume (GTV), high-risk-/intermediate-risk-/low-risk clinical target volume (CTV) and planning target volume (PTV), each according to the GEC-ESTRO recommendations.

The mandatory lectures were very well selected and all clinically relevant. I very much appreciated this online version of the course since it enabled me to repeat certain relevant parts of the lectures.

Did the course activities improve your knowledge and skills in the relevant subject?

Yes, very much. I gained the greatest benefit from contouring the EBRT and brachytherapy cases in the EduCase Falcon platform and I received very valuable individualised feedback on my contours. I think that this is the great strength of this course. I also benefitted from asking questions during the live webinars which were answered promptly, and from watching the mini-contouring exercises during the live webinars. I improved my theoretical and practical skills and refreshed knowledge I had gained two years ago.

Did the course meet your expectations?

Having completed this course in 2018, I roughly knew what to expect this time, but I was sceptical about whether the transition from live course to an online version could succeed. The course definitely met my expectations as it provided again a comprehensive overview of state-of-the-art image guidance techniques for EBRT and brachytherapy. I very much appreciated the separation into live webinars, mandatory lectures and additional material as this enabled me to approach the most relevant lectures first and the less relevant lectures later on. The great advantage to me was the open time-management of the course.

List three important 'takeaways' following the course.

Regardless of whether participants want to refresh their current expertise or learn new things, this course is made for anyone who wants to improve his or her skills in the field of image-guided treatment of gynaecological cancer and the online version provides the same comprehensive overview as the live course.

Direct and individualised feedback on the contouring exercises was most valuable and instructive to me.

Of course, it would have been great to share experiences and network during lunch or breaks with colleagues from all over the world. But I really appreciated the ability to follow this course without any logistical effort.

How will what you have learnt be implemented in your daily job/clinical practice?

MRI-based adaptive target concepts that are set by the ICRU report 89 will replace our existing standards step-by-step for EBRT and brachytherapy. We are going to implement interstitial brachytherapy in the near future. This is going to be a challenge as staff must set aside time to learn this technique during periods when the machine is available.

How would you encourage someone who has never been to an ESTRO course to join this course next year/ in two years?

Anyone who wants to learn and be up-to-date in image-guided treatment of gynaecological cancer, be it for clinical practice or research, should follow this course. I encourage everybody who wants to implement MRI-based adaptive treatment in his or her institution to participate in this course in advance. The course covers a broad range of topics and, besides the live webinars, you can follow the mandatory lectures and the additional material at a time that suits you, whether that is at home or at work.



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