Course report

Particle Therapy

16 – 20 February 2020, Trento, Italy

Course directors:
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Could you please briefly introduce yourself?

My name is Kelvin Ng Wei Siang, and I currently have a medical physicist residency at the University Medical Centre of Groningen (UMCG), Department of Radiation Oncology, The Netherlands.

Why did you choose to attend this course?

At UMCG I have participated in research in proton therapy (e.g. proton quality assurance (QA) and margins for robustness planning), and I have participated frequently in our group discussions about proton treatments. However, I am interested in how other institutions treat their patients with particle therapy. Apart from being part of my training programme package, this course appeared to offer a great opportunity to hear about the experiences of other colleagues; for instance, the issues they had encountered with particle treatment, such as with position verification and imaging; how they had integrated or were going to integrate particle therapy and technologies into the work at their medical centres; and the imaging, planning and delivery techniques they used for various clinical indications. At the same time I thought it would be nice to meet and discuss particle therapy with fellow colleagues who were dealing with or were interested in it.

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

The course was comprehensive in dealing with all aspects of particle therapy, from treatment with different particles and treatment QA through planning and outcomes to financial constraints. I found the case study/discussion sessions particularly interesting as they gave me first-hand accounts of ways in which different institutions treated their patients with particle therapy, and the lessons learned. The morning refreshers of the theory of particle therapy also provided a very good foundation to which I could refer back during the lectures.

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

I got to hear from many different experts about their experiences in particle therapy, and that is something possible only with a course like this. The informal setting during lunch and breaks provided a very good environment for interaction and discussion. Discussions about the future advances of particle therapy, and particularly an informal debate that took place between experts about flash therapy, also gave me food for thought about where we might be heading in the near future. I was also glad to be able to contribute to the journal club discussion by presenting a critical review of a paper on “Bringing Flash into Clinic”. The preparations beforehand and discussions afterwards definitely gave me insights into this technology.

Did the course meet your expectations? If so, how?

The course definitely met my expectations as it provided a comprehensive overview of the current state of particle therapy in Europe. References were made to how other non-European countries approached particle therapy. We can definitely learn from their experiences. However, it would be beneficial if more time was allocated between sessions and breaks, so we could better prepare ourselves for the next talk.

List three important 'takeaways' following the course.

Besides gaining a broad, yet in-depth, overview of particle therapy, clinical activities and state-of-the-art developments in Europe, I was able to meet fellow colleagues and share experiences with them. Moreover I also had the chance to receive direct feedback from experts who were very willing to share their experiences and problems they faced in their own clinics.

How would you encourage someone who has never been to a European SocieTy for Radiotherapy and Oncology (ESTRO) course to join this course next year/ in two years?

This course covers a broad range of topics that are involved in particle therapy, from the theoretical basics to clinical applications. Therefore if you would like to know more about particle therapy, be it out of interest or if you are entering research or clinical practice that involves particle therapy in your own institution, this ESTRO course is tailor-made for you!

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