



Thoracic imaging: course report

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Introduction

Imaging is a very important tool in the work-up of lung diseases. Therefore, all respiratory physicians need to have at least basic knowledge in image interpretation. While, in the past, the common pulmonologist's skill included the interpretation of imaging, in the time of super-specialisations, this job is often left to other specialists, such as those in radiology or nuclear medicine. Furthermore, in some institutions, there is no dedicated chest radiologist and, nowadays, a pulmonologist may have to interpret the imaging studies without any consultation with them.

The European Respiratory Society (ERS) provides many courses on imaging throughout the year and also during the International Congress, imaging is well represented in the programme. However,

most courses to date are specialised courses not covering the broad basics of imaging. For this reason, a 3-day course series on thoracic imaging was initiated and performed in 2012 and 2013. The latest, fully booked, course took place on October 22–24, 2015 in Barcelona, Spain, with 80 participants, most of whom were clinicians from across Europe, and some from Arabic and Asian countries. Some of the participants were economically, totally or partially supported by ERS. The clinical level of the participants ranged from residents up to senior physicians. The course was structured based on two main components: integrating frontal lectures with an interactive voting system; and interactive, break-out sessions (workshops). For workshops, participants were divided into three smaller groups, each able to attend all workshops. Within the seminars, individual cases were discussed in an interactive manner with enough time to include various aspects and challenges of imaging findings. Each seminar was held by an expert in chest radiology and a senior ERS pulmonologist. Based on the feedback of the participants of previous years, new topics were included, especially a practical break-out session devoted to chest ultrasound and a lecture on paediatric thoracic malformations.

The curriculum covered all aspects of thoracic imaging: obstructive, infectious, occupational, interstitial lung disease, small and large airway diseases, mediastinal and vascular/right heart pathologies. The main imaging modalities of radiography and computed tomography (CT) were addressed

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ERS hosted a 3-day course on thoracic imaging in Barcelona, Spain <http://ow.ly/Y767p>



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within the course. Other imaging modalities such as magnetic resonance imaging or positron-emission tomography are not used routinely in clinical practice. The participants were highly motivated to learn about all different aspects of imaging, and many questions were asked at the end of each presentation. The main challenge remained the field of interstitial lung disease, namely the differentiation between various forms.

Internationally renowned chest radiologists were invited as speakers, and all participants had the chance to have close discussion with them about difficult cases during the lectures, seminars, coffee breaks and lunches. To further stimulate the discussion and exchange an image interpretation session with cases from the audience was performed. With participants from Europe and non-European countries a discussion about diagnostic and treatment protocols was stimulated. It occurred that a European imaging board would be helpful for getting a professional second opinion for difficult cases.

In conclusion, the course was a great success and the ERS will continue providing education on imaging. The course format was well chosen providing a structured, lecture based approach to the various topics with new information for the beginners and an update/refresh for the seniors. The interactive seminars were particularly interesting for the participants as all questions on a topic could be discussed from a radiological and clinical perspective. This was again strongly positively mentioned by the participants in the evaluation of the course.

Last but not least, such positive experience would have not been possible without the usual hard and highly professional job of ERS staff.

Deebya Raj Mishra, Nepal, a participant

I am a pulmonologist in training from Nepal, a developing country in South Asia. As expected in a developing country, the expertise for specialty medicine is also in developing phase and specialisation in pulmonary medicine has just been started. We realise the central role of thoracic imaging in respiratory medicine; however, in Nepal and in many other countries in the same position, there are no specialists in thoracic imaging. The result of this is that except for obvious diagnoses, there is always a problem in challenging diagnoses, such as differentiating usual interstitial pneumonia from nonspecific interstitial pneumonia or differentiating sarcoidosis from tuberculosis. These remain a challenge and often we must rely on a therapeutic trial.

Being a member of ERS gave me the opportunity to apply for support for the thoracic imaging course and I was lucky enough to be selected as a recipient

of a full bursary. During training in the beautiful city of Barcelona, I had a wonderful opportunity to interact with the faculty, some of whom were pioneers in their fields. I also met Prof. Nicolino Ambrosino, the ERS External Courses Director, and a highly respected authority in pulmonology.

The topics were very well covered. We started with chest radiography and then extended into lung CT scanning as well as brushing up on thoracic ultrasounds. I was especially impressed by the teaching method of the faculty with regards to different aspects of CT scan as it is one aspect that doctors from developing countries lack the exposure in. By the end of the course, I had a significant understanding of imaging presentation of interstitial lung diseases, occupational lung diseases, approach to reduced lung densities and airway diseases. The case discussions in the second half were really interactive and this is where we felt free to clear our confusions. We were given a chance to identify the changes in the imaging and diagnose the disease. For each topic covered as a lecture, there were at least ten interactive cases with different presentation that were discussed. This really opened our eyes to the challenges faced in diagnosing different cases and about varying presentation of the same disease. The atmosphere under which the course was conducted was very friendly. We had two people from the ERS to guide us and answer our queries at any time.

The participants were an interesting mix; young clinicians like us were the majority but there were also established clinicians and even radiologists who had come to refresh their knowledge. Besides Europe and Nepal we also had participants from Pakistan, Malaysia and Zimbabwe. It was a great opportunity to interact with different faculties, establish contacts for the future and make new friends. I was happy to have made a few friends by the end of the course. I also contacted the faculty and they said they were happy to assist if we were to e-mail difficult cases to them in the future.

Coming back to the course, I believe more time could have been allotted to thoracic ultrasound, especially the hands-on part. Though managing real life cases for ultrasound in training at a non-hospital setting is very difficult, it would definitely have given a better understanding of the presentation of various diseases on the ultrasound. I also believe that a class on approach to nodules in the lung and different presentation and staging of lung cancer *via* imaging would have been beneficial. Somehow, I also felt that maybe the course was a day too short but that may be due to enjoying the course thoroughly and wanting more of it!

Overall, the course was a wonderful experience and I am more than happy with the friends made, links developed and knowledge gained. I thank the ERS for organising such an activity and for giving me an opportunity to be a part of it.