



Chest ultrasonography and X-ray may be perfectly integrated in patients management after thoracic surgery such as Shaq and Kobe

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We read with very interest the review of Dr. Nooitgedacht and colleagues (1) regarding the available literature using chest ultrasonography (CU) in the management of surgically treated patients.

Despite only few reports are present in literature, the possibility to use CU instead chest X-ray (CX) in perioperative care for patients underwent cardio-thoracic surgery is a very intriguing and actual argument, but also a topic that needed the clarification of some crucial points.

We noticed, in their well conducted analysis, that the authors approached a very hot topic: the concordance with CX and the difficulties in CX to CU comparison. Indeed, different specificity and sensibility may be assessed to the two techniques (2), and the difficulties to use a reference test (computed tomography) risks to unsolve this dispute. Recently, a paper published by Smargiassi *et al.* (3), reported the agreement between CU and CX in post-operative period, stating an insufficient concordance especially regarded pneumothorax and lung contusions. We think that the question is not “which is the best exam”, but “which exam is the most appropriate in this case”. Indeed, the main actor of this topic is the patient and his management, that may variate on the basis of the clinical situation, the instruments and the technical skills available at the moment to ensure him the best therapy. Moreover, in this particular

setting (postoperative period), a fundamental point is the clinical significance of the CX or CU findings. We started for this concept for our study (4), considering that many CX findings (e.g., small apical pneumothorax, small basal pleural effusion etc.) in postoperative have not clinical implications, making the exam maybe not useful in many cases. So, we started the investigation using the CU to understand if this approach was possible, with interesting and encouraging results and concluding that this kind of management is possible, using CX as complementary exam if needed.

We are very interested regarding the authors opinion regarding these considerations.

Another well focused point regards the assessment of the skills to perform CU. This topic is well described and adopted for cardiologist, gynaecologist and intensive care physician, being a fundamental part during their growth and residency. On the other hand, with particular reference to our country, skills regarded CU are not requested for thoracic surgeons, also if CU use is present in many activities: Endobronchial Ultrasound, ultrasound-guided chest drainage, ultrasound-guided lung resection, ultrasound-guided lung biopsy and many other operative procedures. We are trying to form our residence to the use of CU with frontal lessons, practice and participating

to CU courses, with the objective to acquire CU skills and knowledge also for post-operative evaluation. Indeed, together with clinical evaluation, we think that CU is a fundamental instrument for our work, especially for the possibility to have an immediate imaging in case of emergency or to be independent to CX, saving at least a lot of time and permitting to promptly treat the patient.

This is our experience, but we are interested to know if also the author started a training programme for residents or how may be managed.

On the basis of the consideration reported, we would really appreciate the authors' reflections and reaction on the aspects debated.

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Footnote

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