Letter to the Editor

Chest ultrasound versatility in routinary to complicated cases: our perspective

Marco Chiappetta[1,2], Gianmaria Ferretti[1,2], Maria Teresa Congedo[1,2], Maria Letizia Vita[1,2], Stefano Margaritora[1,2]

[1]Universita Cattolica del Sacro Cuore, Rome, Italy; [2]Thoracic Surgery, Fondazione Policlinico Universitario A. Gemelli, IRCCS, Rome, Italy

Correspondence to: Dr. Marco Chiappetta. Fondazione Policlinico Universitario A. Gemelli, IRCCS, L.go A. Gemelli 8, 00168 Rome, Italy. Email: marcokiaps@hotmail.it; marco_chiappetta@yahoo.it.

Provenance: This is an invited article commissioned by the Academic Editor Dr. Shuangjiang Li (Department of Thoracic Surgery and West China Medical Center, West China Hospital, Sichuan University, Chengdu, China).

Response to: Patella M, Mongelli F, Cafarotti S. The importance of asking the right questions: the role of chest ultrasound in thoracic surgery. J Thorac Dis 2019;11:S359-62.

Submitted Jun 28, 2019. Accepted for publication Aug 13, 2019.

doi: 10.21037/jtd.2019.08.82

View this article at: http://dx.doi.org/10.21037/jtd.2019.08.82

We read with interest the paper "The importance of asking the right questions: the role of chest ultrasound in thoracic surgery" by Patella *et al.* (1).

The article examines the role of ultrasound after thoracic surgery, its potential use in the clinical practice of every thoracic surgeon but also questions which specialist may be the best operator in this setting.

The authors also cited our article regarding the effectiveness of chest ultrasound (CU) after thoracic surgery (2), stating that our results are encouraging but limited by the fact that ultrasound was used to confirm absence of complications.

Maybe this point needs other considerations. Indeed, chest ultrasonography is currently used to analyze pleural and lung abnormalities such as pneumonia, atelectasis or pleural effusion (3,4), and we looked for these alterations in every patient, underlining the possibility to identify a true consolidation or a post-operative atelectasis. Moreover, we compared the information that could be acquired from CU with the ones deriving from chest X-rays (CXR) after thoracic surgery, finding that, in most cases, CU could have been used for post-operative patient management (5).

In fact, as far as we know, the use of ultrasound allows to reduce the costs of hospitalization and has, in our opinion, the following advantages:

- It can be performed at patients' bed;
- It doesn't require staff personnel to move the patient to the radiology department;
- It decreases stress of patients and becomes a moment of the clinical visit during which the doctor-patient relationship can improve;
- It helps not overloading the radiology department with requests and therefore to be able to obtain the results of urgent radiological examinations more quickly.

We really appreciate the authors' considerations regarding the advantages that we noticed, if they are common or not in their experience.

In our experience, with the possibility to perform a daily rapid exam, CU plays an even more important role in complicated cases, with the possibility to have an early detection and move to other exams such as CXR or CT Scan, thus saving time. Of course, the correct use of ultrasound is related to the surgeon's ability to evaluate the indication of its execution.

Regarding the last point of the editorial, the questions and answers about which professional figure should perform and interpret the CU and the path to get the certification for it are very interesting and deserve particular consideration.

In our department, two operative units coexist: our thoracic surgery unit and the pneumology operative unit. All the members of our team undertook echography courses organized by ultrasound-expert physicians during the last 10 years. Moreover, we use ultrasonography regularly for ultrasound-guided procedures and whenever it's possible we

collaborate with pneumologists. This has allowed us to gain practice in ultrasound and, in case of need, have an in-site expert to help us decipher ultrasound images as accurately as possible.

We realize that the collaboration that has been established between us and our pneumologist colleagues in recent years is a distinctive feature of our department and that it is not easy to find in other hospitals. It is probably for this reason that we very much believe in chest ultrasonography; we succeed deciphering images with the surgical approach of those who know the type of operation performed and with the backup of the clinical pneumologist who adds his experience.

The author of the editorial reported collaborations with experienced radiologist; we think that independently from the specialty, a correct training and a large experience are mandatory.

What is your opinion regarding this point?

Acknowledgments

None.

Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Cite this article as: Chiappetta M, Ferretti G, Congedo MT, Vita ML, Margaritora S. Chest ultrasound versatility in routinary to complicated cases: our perspective. J Thorac Dis 2019;11(Suppl 15):S2030-S2031. doi: 10.21037/jtd.2019.08.82

References

1. Patella M, Mongelli F, Cafarotti S. The importance of asking the right questions: the role of chest ultrasound in thoracic surgery. J Thorac Dis 2019;11:S359-62.
2. Chiappetta M, Meacci E, Cesario A, et al. Postoperative chest ultrasound findings and effectiveness after thoracic surgery: A pilot study. Ultrasound Med Biol 2018;44:1960-7.
3. Reissig A, Copetti R, Mathis G, et al. Lung ultrasound in the diagnosis and follow-up of community-acquired pneumonia: a prospective, multicenter, diagnostic accuracy study. Chest 2012;142:965-72.
4. Hooper C, Lee YC, Maskell N, et al. Investigation of a unilateral pleural effusion in adults: British Thoracic Society Pleural Disease Guideline 2010. Thorax 2010;65 Suppl 2:ii4-17.
5. Smargiassi A, Inchingolo R, Chiappetta M, et al. Agreement between chest ultrasonography and chest X-ray in patients who have undergone thoracic surgery: preliminary results. Multidiscip Respir Med 2019;14:9.

