

Critical care transesophageal lung ultrasonography examination using transesophageal echocardiography

Sayeeda Warsi

Warsi S. Critical care transesophageal lung ultrasonography examination using transesophageal echocardiography. *J Chest Lung Res* 2022; 3(3):27-28.

Many examination testamurs have accomplished the arduous criteria of a thorough logbook, which is necessary for certification; others are involved in this difficult process, with significant participation from fellows and junior attendings.

Key Words: *Echocardiogram*

ABSTRACT

The National Board of Echocardiography provides Advanced Critical Care Echocardiography Certification (ACCE). More than 1,000 critical care professionals have previously completed the National Board of Echocardiography test, which is given in January, and the fourth iteration of the exam has more than 400 registrants.

INTRODUCTION

Advanced critical care services The International Statement on Training Standards for Advanced Critical Care clearly defines echocardiography. Transthoracic Echocardiogram (TTE) and Transesophageal Echocardiography (TEE) are both part of ACCE, according to echocardiography. TEE is frequently utilised in European ICUs and is becoming more popular in North American ICUs. TEE is most useful in the ICU when TTE does not produce acceptable picture quality to address a clinical question. TEE will give enough picture quality in this scenario, excluding contraindications. When patient-related issues such as obesity, major edoema, heavy musculature, chest wall factors, or the difficulties to position the patient for effective TTE imaging develop, TEE is frequently used. Intensive care TEE is used on individuals who are on mechanical ventilation with severe cardiac or pulmonary failure. Although the primary role of both critical care TEE and cardiology TEE is to examine heart function, it may also be used to scan the lung and pleural area in patients with critical disease. Although it is uncommon for a patient getting elective TEE by a cardiologist to have consequential pulmonary illness, given the nature of disease processes that necessitate ventilatory support, the intensivist will commonly find important lung and pleural abnormalities during a TEE examination. It is the intensivist's responsibility to be conversant with the procedure and results of pleural and lung illnesses acquired during the critical care TEE assessment. TELUS is conducted in combination with the descending aorta examination, which is a regular element of the TEE test. With the transducer angle originally adjusted to 0°C, the left infer posterior hemi thorax is easily observed through the descending aorta.

The inferoposterior hemithorax can be fully examined by turning the probe clockwise. The superoposterior hemithorax may be seen after withdrawing and inserting the probe. The transducer angle is extended to 90°C to evaluate the pleural space, lung, diaphragm, and underlying spleen, with occasional vision of the left kidney. After the left hemithorax has been examined, the probe is moved counter clockwise to transfer the tomographic plane over the vertebral structures to investigate the right hemithorax. The right posterior hemithorax, which comprises the pleural space, lung, diaphragm, and underlying liver, is viewed using the same procedure as the left side (first with transducer angle at 0°C, then at 90°C). We have found that the right hemithorax is more difficult to inspect than the left, with cardiac interposition occasionally obstructing an acceptable view. TELUS has the limitation that the inspection is frequently confined to the posterior hemithorax. Because of the gravity force, free flowing pleural fluid preferentially distributes to the dependent thorax; acute lung damage also frequently prefers the dependent lung; TELUS is well suited to scan these regions. TELUS indications are comparable to critical care TEE indications, particularly when obesity, heavy musculature, subcutaneous emphysema, chest wall dressings, chest wounds, or a difficulty to position the patient impair transthoracic views to the point where TTE produces poor pictures. TELUS has the capacity to scan properly the posterior lungs of the supine patient with severe disease, getting access to places that transthoracic ultrasonography cannot. The dependent areas of the lungs (inferoposterior) and the blind spots caused by the scapulae (superoposterior) are sometimes difficult to access in the supine patient with severe disease during a typical transthoracic examination.

Editorial Office, *Journal of Chest and Lung Research*, United Kingdom.

Correspondence: Sayeeda Warsi, Editorial Office, *Journal of Chest and Lung Research*, United Kingdom. e-mail: lungresearch@pulsusjournal.com

Received: 05 June 2022, Manuscript No. PULCLR-22-5064; Editor assigned: 07 June 2022, PreQC No. PULCLR-22-5064 (PQ); Reviewed: 22 June 2022, QC No. PULCLR-22-5064 (Q); Revised: 25 June 2022, Manuscript No. PULCLR-22-5064 (R); Published: 28 June 2022, DOI: [10.37532/pulclr.2022.3\(3\).27-28](https://doi.org/10.37532/pulclr.2022.3(3).27-28)



This open-access article is distributed under the terms of the Creative Commons Attribution Non-Commercial License (CC BY-NC) (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits reuse, distribution and reproduction of the article, provided that the original work is properly cited and the reuse is restricted to noncommercial purposes. For commercial reuse, contact reprints@pulsus.com

Warsi

TELUS indications are similar to critical care TEE indications, especially when obesity, heavy musculature, subcutaneous emphysema, chest wall dressings, chest wounds, or difficulties positioning the patient impede transthoracic views to the extent that TTE yields unsatisfactory images. TELUS has the ability to scan the posterior lungs of a supine patient with severe illness in a way that transthoracic ultrasonography cannot.

During a conventional transthoracic examination, the dependent portions of the lungs (inferoposterior) and the blind spots formed by the scapulae (superoposterior) might be difficult to access in a supine patient with severe illness. TELUS is a simple addition to the conventional critical care TEE examination that can offer valuable information in patients with severe illnesses.