

SUPPLEMENTARY INFORMATION

Appreciation Questionnaire – English Version

This questionnaire is the English translation of the original questionnaire administered in French. It is intended to assess the perceived impact of Focused ultrasound (point-of-care ultrasound, POCUS) teaching at the undergraduate medical level on students' learning of anatomy and physiology, and to help guide future educational offerings.

Student Information

1. Please enter today's date (YYYY-MM-DD).
2. Please indicate which residency program you plan to enter at the end of your undergraduate medical training.

Educational Material

4. The recommended textbook, Focused Ultrasound Level 1 (Peter Steinmetz, MD; French translation by Dr Claude Topping), helped me understand the concepts covered during the course.

[Strongly agree / Agree / Disagree / Strongly disagree / Not applicable]

5. If you disagree or strongly disagree, please specify why the material was insufficient or suggest alternative resources.

6. The PowerPoint presentations provided helped me review key concepts.

[Strongly agree / Agree / Disagree / Strongly disagree / Not applicable]

7. If you disagree or strongly disagree, please specify how the presentations could be improved.

Learning of Anatomy and Physiology

8. Focused ultrasound (point-of-care ultrasound, POCUS) courses helped me reinforce anatomy concepts learned in other courses.

[Strongly agree / Agree / Disagree / Strongly disagree / Not applicable]

9. If you disagree or strongly disagree, please explain your answer or suggest improvements.

10. Focused ultrasound (point-of-care ultrasound, POCUS) courses helped me integrate anatomical knowledge with its application in clinical medicine.

[Strongly agree / Agree / Disagree / Strongly disagree / Not applicable]

11. If you disagree or strongly disagree, please explain your answer or suggest improvements.

12. Integrative Focused ultrasound (point-of-care ultrasound, POCUS) sessions (eg, sepsis, polytrauma, shock) helped me better understand physiological concepts and their clinical relevance.

[Strongly agree / Agree / Disagree / Strongly disagree / Not applicable]

13. If you disagree or strongly disagree, please explain your answer or suggest improvements.

14. I plan to use Focused ultrasound (point-of-care ultrasound, POCUS) during my residency.

[Strongly agree / Agree / Disagree / Strongly disagree / Not applicable]

15. If you disagree or strongly disagree, please explain why or suggest improvements.

Teaching Evaluation

16. The duration of the Focused ultrasound (point-of-care ultrasound, POCUS) sessions was sufficient to allow hands-on practice.

[Strongly agree / Agree / Disagree / Strongly disagree / Not applicable]

17. If you disagree or strongly disagree, please explain your answer or suggest improvements.

18. Focused ultrasound (point-of-care ultrasound, POCUS) instructors effectively linked anatomical concepts to relevant clinical contexts.

[Strongly agree / Agree / Disagree / Strongly disagree / Not applicable]

19. If you disagree or strongly disagree, please explain your answer or suggest improvements.

20. I appreciated having radiology residents as instructors (selected campuses only).

[Strongly agree / Agree / Disagree / Strongly disagree / Not applicable]

21. Regardless of your rating, please comment on the perceived value of having radiology residents as instructors or suggest improvements.

Assessment of Learning

22. A written formative assessment (including images and clinical vignettes) after each session would have helped consolidate my learning.

[Strongly agree / Agree / Disagree / Strongly disagree / Not applicable]

23. If you disagree or strongly disagree, please explain why this would not be beneficial.

24. A written formative assessment at the end of Year 4 would have helped consolidate my learning in Focused ultrasound (point-of-care ultrasound, POCUS).

[Strongly agree / Agree / Disagree / Strongly disagree / Not applicable]

25. If you disagree or strongly disagree, please explain why this would not be beneficial.

26. A practical formative assessment (OSCE-type) after each session would have helped consolidate my learning.

[Strongly agree / Agree / Disagree / Strongly disagree / Not applicable]

27. If you disagree or strongly disagree, please explain why this would not be beneficial.

28. A practical formative assessment (OSCE-type) at the end of Year 4 would have helped consolidate my learning in Focused ultrasound (point-of-care ultrasound, POCUS).

[Strongly agree / Agree / Disagree / Strongly disagree / Not applicable]

29. If you disagree or strongly disagree, please explain why this would not be beneficial.

Knowledge Assessment Quiz – English Version

This quiz is the English translation of the original quiz administered in French. It assesses knowledge retained following undergraduate Focused ultrasound (point-of-care ultrasound, POCUS) teaching sessions. Questions are based on ultrasound images used during the course.

The following questions are related to the ultrasound image shown below:



1. What ultrasound view is shown?

- Longitudinal right upper quadrant view
- Subxiphoid cardiac view

- Transverse gallbladder view
- Transverse abdominal aorta view

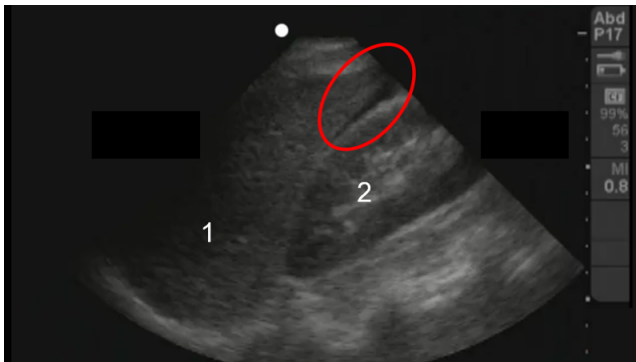
2. Which structure is indicated by number 1?

- Inferior vena cava
- Gallbladder
- Abdominal aorta
- Femoral artery

3. Which structure is indicated by number 2?

- Inferior vena cava
- Gallbladder
- Abdominal aorta
- Femoral artery

The following questions are related to this right upper quadrant ultrasound image:



4. Which structure is indicated by number 1?

- Kidney
- Liver
- Spleen
- Gallbladder

5. Which structure is indicated by number 2?

- Kidney
- Liver
- Spleen
- Gallbladder

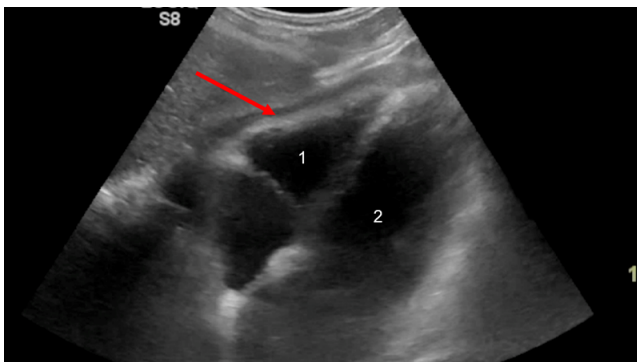
6. Which pathology is circled in red?

- Pleural effusion
- Free intraperitoneal fluid
- Gallstones
- Hydronephrosis

7. In a polytrauma patient in shock, this finding most strongly suggests:

- Pneumothorax
- Hemothorax
- Hemoperitoneum
- Hemopericardium

The following questions are related to this subxiphoid cardiac view:



8. Which cardiac structure is indicated by number 1?

- Right atrium

- Left atrium
- Right ventricle
- Left ventricle

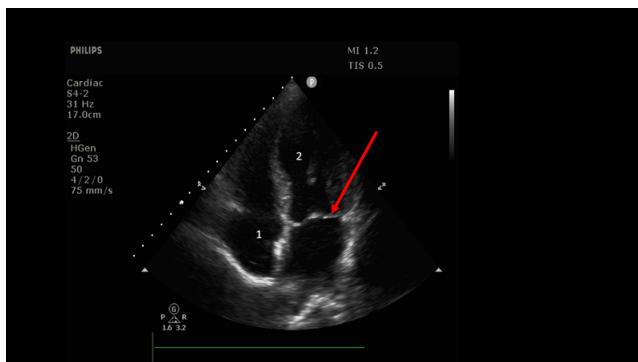
9. Which cardiac structure is indicated by number 2?

- Right atrium
- Left atrium
- Right ventricle
- Left ventricle

10. Which bright, hyperechoic structure is indicated by the red arrow?

- Diaphragm
- Inferior pericardium
- Interventricular septum
- Pleura

The following questions are related to this apical four-chamber cardiac view:



11. Which structure is indicated by number 1?

- Right atrium
- Left atrium
- Right ventricle
- Left ventricle

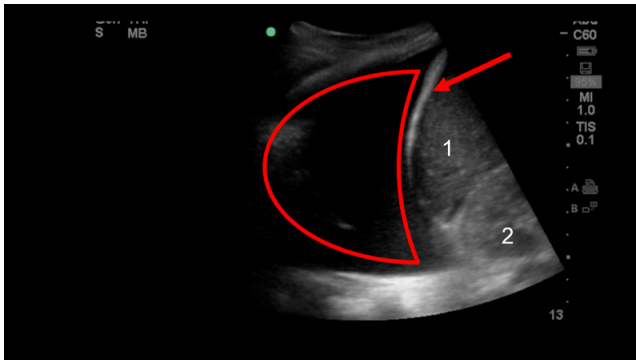
12. Which structure is indicated by number 2?

- Right atrium
- Left atrium
- Right ventricle
- Left ventricle

13. Which cardiac valve is indicated by the red arrow?

- Aortic valve
- Pulmonic valve
- Mitral valve
- Tricuspid valve

The following questions are related to this left upper quadrant ultrasound image:



14. Which structure is indicated by number 1?

- Kidney
- Liver
- Spleen
- Gallbladder

15. Which structure is indicated by number 2?

- Kidney
- Spleen

- Liver
- Gallbladder

16. Which bright, hyperechoic structure is indicated by the red arrow?

- Diaphragm
- Pericardium
- Pleura
- Spine

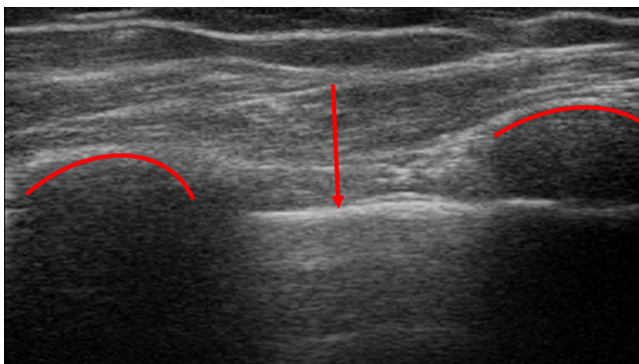
17. What finding is represented by the anechoic (black) cavity?

- Pulmonary consolidation
- Free intraperitoneal fluid
- Pleural effusion
- Pericardial effusion

18. In a polytrauma patient in shock, this finding is most consistent with:

- Pneumothorax
- Hemothorax
- Hemoperitoneum
- Hemopericardium

The following questions are related to this lung ultrasound image:



19. Which structure is indicated by the red arrow?

- Pericardium
- Diaphragm
- Pleura
- Spine

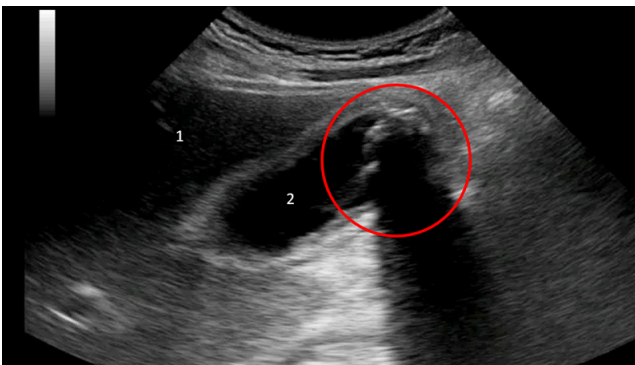
20. Which structures (circled) represent the anatomical landmarks of this view?

- Vertebrae
- Intercostal arteries
- Intercostal muscles
- Ribs

21. In a patient presenting with chest pain and dyspnea, absence of pleural sliding most likely indicates:

- Pneumothorax
- Hemothorax
- Hemoperitoneum
- Pneumoperitoneum

The following questions are related to this right upper quadrant ultrasound image:



22. Which structure is indicated by number 1?

- Kidney
- Spleen

- Gallbladder
- Liver

23. Which structure is indicated by number 2?

- Kidney
- Spleen
- Gallbladder
- Liver

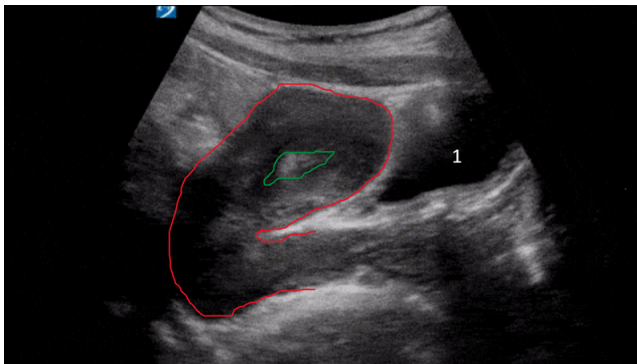
24. Which significant finding is circled in red?

- Gallstones
- Atheromas
- Placental debris
- Papillary muscles

25. Based on the ultrasound image and the clinical presentation, what is the most likely diagnosis?

- Cholangitis
- Cholecystitis
- Biliary colic
- Choledocholithiasis

The following questions are related to this sagittal pelvic ultrasound image:



26. Which anechoic (black) structure is indicated by number 1?

- Uterus
- Descending colon
- Left ovary
- Bladder

27. Which structure is circled in red?

- Uterus
- Descending colon
- Left ovary
- Bladder

28. Which bright, hyperechoic structure is circled in green?

- Peritoneum
- Endometrial line
- Diaphragm
- Spine