UG-STAT

Ultrasound-Guidance Skills and Tasks Assessment Tool for pleural diagnosis, thoracentesis and chest tube insertion*

*Clinical research/validated assessment tool with instructions, quiz and quiz answers applicable to an international audience of health care providers. Designed and developed by Dr. Matthew Salamonsen and team, Brisbane, Australia. See: Salamonsen M, McGrath D, Steiler G, et al. Chest 2013
Ultrasound-Guided Thoracentesis Skills and Tasks Assessment Tool (UGSTAT)

Name: ___________________________   Position _____________

Assessor Name: ___________________________ Date ______________

Prior thoracic US experience: Educational Course □ Yes □ No  # US performed to date: ___

Instructions
Ensure all equipment is available including US machine, probes and US gel.
Please read instructions in red below. You may repeat instructions and assist with location of the US controls when asked, but Do NOT give any extra prompting or ask additional questions. If a participant requires prompting, score zero for that assessment point.

Educational Item | Score
--- | ---
1. "Please tell me what the following controls on the US machine do: - name each control (1 point each, target 10 points)
   - On/Off
   - Depth
   - Focus
   - Time-gain-Compensation (TGC)
   - Freeze
   - Overall gain
   - Harmonics
   - Dynamic range
   - Frequency control
   - Image capture
   Score ___/10

2. "Tell me the name of each of these probes" point to linear and convex probe.
   Linear □ Curved
   Score ___/6

3. "What would you do to prepare the US machine for the exam? What probe would you use? How would you position the patient?" (3 points each, target 12 points)
   - Patient data
   - Presettings
   - Probe
   - Patient position
   Score ___/12

4. "Now start the US exam. You may ask for the location of specific US controls. Describe what you are doing."
   Uses correct probe grip, orientation and handling. (3 points each, target 6 points)
   - Grip
   - Orientation and handling
   Score ___/6

5. Able to optimize sonographic image. You can assist if required but score zero if assistance is given. (3 points each, target 9 points)
   - Depth
   - Focus
   - Time-Gain-Compensation
   Score ___/9

6. "Please show me the liver/spleen (dependent on side), lung, and superior margin of rib" (4 points each, target 12 points).
   - Liver or Spleen inferior to effusion
   - Lung superior to effusion
   - Rib margin
   Score ___/12

7. "Show me the area on the chest wall corresponding to the maximal depth of effusion" (target 4 points)
   - Identifies site on chest wall corresponding to maximal depth of effusion
   Score ___/4

8. "Now measure the distance from skin to effusion and skin to a suitable needle depth" (target 3 points)
   - Accurately measures distance to effusion and suitable needle depth
   Score ___/3

9. "Would you describe loculations as absent, minor or extensive? Please place your finger on the skin where you would mark to insert the needle" Check the mark to confirm it is at superior border of rib. (4/3/3 points each, target 10 points)
   - Correctly indicates absent loculations
   - ID correct site on skin for needle insertion
   - Site is at top of rib
   Score ___/10

10. Ask candidate to complete UGSTATQuiz questions sheets (1 point each, target 10 points)
    - Image 1
    - Image 2
    - Image 3
    - Image 4
    - Image 5
    - Image 6
    - Image 7
    - Image 8
    - Image 9
    - Image 10
   Score ___/10

11. Overall performance/fluidity of movement
    (Score 0 for unsatisfactory, 9 for satisfactory, 18 for excellent - target 18 points)
    - Unsatisfactory
    - Satisfactory
    - Excellent
    Score ___/18

FINAL GRADE  PASS  NEEDS IMPROVEMENT  SCORE ________/100
UGSTAT Quiz Questions

Name ______________________

Only FIVE of these photos have corresponding image descriptions

UGSTAT Question 10: Match the sonographic photo (A-F) to the corresponding 5 descriptions (Only one response per description)

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<td><strong>No Response</strong></td>
<td>1. Complex effusion with hyperechogenic shadows</td>
<td>2. Multiloculated (complex septated) effusion</td>
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UGSTAT Quiz Questions

Name __________________________

UGSTAT Question 10: Match the sonographic photo (A-F) to the corresponding 5 descriptions (Only one response per description)

- No Response
- 6. Floating lung sign
- 7. Complex non septated effusion
- 8. Diaphragmatic nodules
- 9. Effusion in severely obese person
- 10. Large anechoic effusion
UGSTAT Quiz Answers

UGSTAT Question 10: Match the sonographic photo (A-F) to the corresponding 5 descriptions (Only one response per description)

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No Response

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Bronchoscopy International is a transnational organization whose members are devoted to bronchoscopy education. Our vision is that patients need not suffer the burden of medical procedure-related training. Our mission is to help physicians become skilled practitioners, and to make bronchoscopy more readily available to patients so that we might defeat the effects of lung disease around the world.

Bronchoscopy International partners with national, regional, and international medical societies to train physicians and their health care teams, donate equipment, and implement learning programs that support the democratization of knowledge. The organization has developed a six part curriculum to enhance cognitive, affective and experiential knowledge and technical skill. With implementation of the Bronchoscopy Education Project, we also offer a uniform curriculum to training centers and educators around the world. The project is officially endorsed by numerous professional medical associations. Learning resources include books and training manuals, instructional videos, patient-centered problem-based exercises, simulation scenarios, and interactive on-site and on-line seminars. Faculty Development Programs are conducted to nurture a cadre of expert educators. To learn more about Bronchoscopy International and our global activities, please go to www.Bronchoscopy.org.