Ultrasound OSCE Final Examination

Surname, given name: Examiner:

Date: Examiner:

Orientation:

- Initial handling of the transducer
  - correct, initial check by disconnecting the cranial part of the transducer by him-/herself
  - initial problems or forgotten, corrected after examiner’s reminder (see guidelines)
  - needs examiner’s help to find the proper orientation

Positioning:

- correct, puts transducer in place right away
  - initial problems, but can adjust based on the examiner`s reminder (see guidelines)
  - needs examiner’s help to position the transducer at the proper place

Connection:

- connects the transducer adequately to the skin, adjusts pressure if necessary
  - initial problems, but can adjust based on the examiner’s reminder (see guidelines)
  - insufficient pressure, does not succeed in connecting the transducer to the skin without help

Adequate magnification factor and focus zone

- adjusts magnification factor/focus zone by him-/herself immediately
  - initial problems, but can adjust based on the examiner’s reminder (see guidelines)
  - does not achieve an adequate zoom factor even after examiner’s feedback/2° to time limits

Patient guidance: Breathing commands

- correct: “Please take a deep breath – and hold it!” (or similar)
  - incomplete/initial problems (forgotten)/examiner`s reminder necessary (see guideline)
  - even after reminder incomplete or forgets to ask the patient to inhale

Examination

Visualization of the portal vein:

- Performs by him/herself an entire periporal scan, reliable longitudinal visualization of the portal vein; adjacent structures completely evaluated.
  - Incompletely visualized or only in an oblique slice.
  - Only with manual assistance by assessor
  - Nothing seen; adequate visualization not achieved despite manual assistance

Measurement:

- Measured at the hepatic hilum perpendicular to the course of the vessel, endpoints correctly chosen
  - Incorrect measuring points or upon request see “Measurement Guidelines”
  - Measurement with manual assistance of assessor (see guidelines)
  - Incorrectly measured despite manual assistance

Image interpretation

“After freezing the image on the monitor, please identify an intrahepatic branch of the portal vein and of a hepatic vein, and identify the proper hepatic artery at the hilum.”

- Correctly identifies the proper hepatic artery (2), a branch of the portal vein (1), and a branch of a hepatic vein. (1)

Overall performance (global rating scale)

<table>
<thead>
<tr>
<th>Outstanding</th>
<th>8 - 7</th>
<th>6 - 5</th>
<th>4 - 3</th>
<th>2 - 1</th>
<th>Poor</th>
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<td>0-8</td>
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Theoretical background

- Please specify the ultrasound signs of portal hypertension: Dilated portal or splenic vein (1) splenomegaly (1), ascites (1), esophageal varices (1), Crueilhier-Baumgarten syndrome. (1)
  - Please explain how ascites develops in cirrhosis of the liver. Congestion from the portal vein extends back into the mesenteric veins (1), hydrostatic pressure ↑ (2), osmotic pressure ↓ due to decreased albumin levels (2)

Total number of points (max. 50):

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