Richmond Agitation-Sedation Scale (RASS)

<table>
<thead>
<tr>
<th>Score</th>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>+4</td>
<td>Combative</td>
<td>Overly combative, violent, immediate danger to staff</td>
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<tr>
<td>+3</td>
<td>Very agitated</td>
<td>Pulls or removes tubes or catheters, aggressive</td>
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<tr>
<td>+2</td>
<td>Agitated</td>
<td>Frequent non-purposeful movements, fights ventilator</td>
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<tr>
<td>+1</td>
<td>Restless</td>
<td>Anxious, but movements not aggressive or vigorous</td>
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<tr>
<td>0</td>
<td>Alert and calm</td>
<td>Not fully alert, but sustained awakening (eye opening, eye contact to voice (&gt;10 sec))</td>
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<tr>
<td>-1</td>
<td>Drowsy</td>
<td>Briefly awakens with eye contact to voice (&lt;10 sec)</td>
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<tr>
<td>-2</td>
<td>Light sedation</td>
<td>Movement or eye opening to voice (but no eye contact)</td>
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<tr>
<td>-3</td>
<td>Moderate sedation</td>
<td>No response to voice, but movement or eye opening to physical stimulation</td>
</tr>
<tr>
<td>-4</td>
<td>Deep sedation</td>
<td>No response to voice or physical stimulation</td>
</tr>
<tr>
<td>-5</td>
<td>Unarousable</td>
<td>No response to voice or physical stimulation</td>
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A target RASS score should be defined daily and assessed hourly with sedation adjusted to achieve the desired score. The night team should decide how frequently the scoring should be completed at night in a sleeping patient.

All patients should have a daily sedation stop. Only discuss with the doctors beforehand if the patient is receiving paralysing agents, has a FiO2 >80% or is receiving HFOV. Stop long-term sedatives and analgesia at 06:00. Stop short-term sedatives after handover between 08:15 – 08:30.

Procedure for RASS assessment

1) Observe patient: is patient alert and calm? (Score 0). Does patient have behaviour that is consistent with restlessness or agitation? (Score +1 to +4 using the criteria listed above)

2) The patient is not alert. In a loud speaking voice, state patient's name and direct patient to open eyes and look at speaker. Repeat once if necessary.

3) Does patient awaken with sustained eye opening and eye contact?  
Patient has eye opening and eye contact, which is sustained for more than 10 s (score –1)  
Patient has eye opening and eye contact, but this is not sustained for 10 s (score –2)  
Patient has any movement in response to voice, excluding eye contact (score –3)

4) If patient does not respond to voice, physically stimulate patient by shaking shoulder. If there is no response to shaking shoulder, stimulate patient by rubbing sternum.  
Patient has any movement to physical stimulation (score –4)  
Patient has no response to voice or physical stimulation (score –5)
Confusion Assessment Method for the ICU (CAM-ICU) Flowsheet

1. Acute Change or Fluctuating Course of Mental Status:
   - Is there an acute change from mental status baseline? OR
   - Has the patient's mental status fluctuated during the past 24 hours?
   - YES → NO → CAM-ICU negative NO DELIRIUM
   - NO

2. Inattention:
   - "Squeeze my hand when I say the letter 'A'!"
   - Read the following sequence of letters: SAVE AHA ART or CASABLANCA or ABAB ABABA
   - ERRORS: No squeeze with 'A' & Squeeze on letter other than 'A'
   - NO ERRORS → 0 - 2 Errors → CAM-ICU negative NO DELIRIUM
   - > 2 Errors

3. Altered Level of Consciousness
   - Current RASS level
   - RASS = zero
   - RASS other than zero → CAM-ICU positive DELIRIUM Present

4. Disorganized Thinking:
   - 1. Will a stone float on water?
   - 2. Are there fish in the sea?
   - 3. Does one pound weigh more than two?
   - 4. Can you use a hammer to pound a nail?
   - Command: "Hold up this many fingers" (Hold up 2 fingers)
   - "Now do the same thing with the other hand" (Do not demonstrate) OR
   - "Add one more finger" (If patient unable to move both arms)
   - > 1 Error → CAM-ICU negative NO DELIRIUM
   - 0 - 1 Error

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Guidelines for assessing CAM-ICU in the GICU

The Confusion Assessment Method ICU (CAM-ICU) is a validated tool for measuring delirium in ICU, it is designed to be quick, easy and used in combination with the RASS. It consists of 4 features, designed to identify an acute onset change in mental status, inattention, a change in conscious level and disorganised thinking, not all of which may need completion on each assessment. In patients who do not speak English then if appropriate then please ask the family to help with the testing or identify a member of staff who may be able to converse with the patient. For consistency, please record if the family have assisted. Record the assessment on the ICU chart using the sticker kept in the grey filing cabinet by the main ICU desk.

The CAM-ICU should only be measured if the patients Richmond Agitation and Sedation Score (RASS) is between -3 and +4. If the score is -4 or -5 then the patient is unsuitable to assess CAM-ICU. If the score is -4 or -5 unless this is appropriate for the patients’ condition the sedation should be reduced and the CAM-ICU assessed once a level of -3 is achieved.

If the patients RASS is between -3 and +4, continue to feature one (put a put a tick in the box)
If the patients RASS is -4 or -5, stop, it is not possible to assess the CAM-ICU (put a cross in the box)

FEATURE ONE – ACUTE ONSET
Identify if the patient is behaving differently than their normal baseline mental status or has the patient had any fluctuation in mental status in the past 24hrs as evidenced by changes in RASS, GCS or CAM-ICU
If yes, continue to feature two (put a tick in the box)
If no, stop the patient is not delirious (put a cross in the box and tick the box identifying the patient is CAM-ICU negative)

FEATURE TWO – INATTENTION
Identify if the patient can squeeze you hand or respond using for example a nod or blink. If so, repeat slowly a series of 10 letters where the patient should squeeze only on the letter ‘A’ (SAVEAHAART; CASABLANCA; ABABADAAY). Ensure the environment is such that the patient is not distracted by excessive noise or activity around the bedside and is at a time when the assessor is unlikely to be distracted. Should the patient make three mistakes, either not squeezing on ‘A’ or squeezing on another letter, then they are considered to have failed this test. If the patient is unable to indicate appropriately the picture test may be more suitable.
If the patient makes three or more mistakes continue to feature three (put a tick in the box)
If not, stop the patient is not delirious (put a cross in the box and tick the box identifying the patient is CAM-ICU negative)

FEATURE THREE – CONSCIOUS LEVEL
Identify if the patients RASS is anything other than zero
If the RASS is not 0 and feature one and two are also positive then the patient is CAM-ICU positive (put a tick in the box and tick the box identifying that the patient is CAM-ICU positive)
If the RASS is 0, continue to feature four (put a cross in the box)

FEATURE FOUR - DISORGANISED THINKING
This test requires the patient to complete two tests. The first is a series of simple questions that require a yes/no answer. The patient should be asked the following questions clearly and slowly:
- Does a stone float on water?
- Are there fish in the sea?
- Does one pound weigh more than two pounds?
• Can you use a hammer to hit a nail?

Having completed the questions, ask the patient to hold up two fingers and demonstrate by holding up two fingers in the patient’s vision. Then ask the patient to hold up two fingers on the other hand without demonstrating this. Two mistakes for the combined tests are positive.

  If the patient makes two or more mistakes the patient is delirious (put a tick in the box and tick the box identifying that the patient is CAM-ICU positive)

  If the patient makes one or no mistakes, the patient is not delirious (put a cross in the box and tick the box identifying the patient is CAM-ICU negative)

ACTION FOR MEDICAL STAFF

If a patient has a positive CAM-ICU, please consider the following causes of delirium and complete the GICU delirium checklist, this can be found in the same drawer as the CAM-ICU stickers.

  1) Hypoxia
  2) Infection
  3) Pain
  4) Constipation
  5) Delirium-inducing medications
  6) Issues with nutrition
  7) Metabolic disturbances
  8) Hearing/visual impairments

Further information can be found at http://www.icudelirium.co.uk/diagnosing-delirium/ a link to this website is on the ICU/HDU PC’s or http://www.icudelirium.org/docs/CAM_ICU_training.pdf

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