Screening for Paediatric Delirium using the CAPD tool

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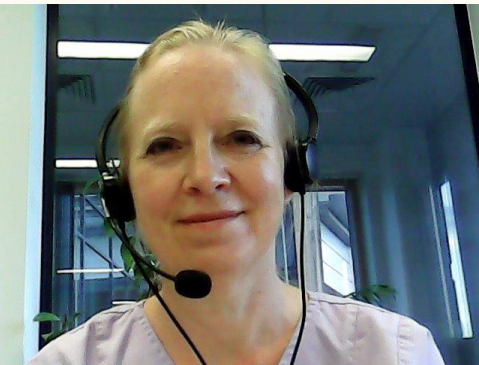


Objectives

- Overview of CAPD
- When to perform a CAPD assessment
- How to perform a CAPD assessment
- Anchor points for patients under 2 years of age
- Sample patient with hypoactive delirium

Cornell Assessment of Pediatric Delirium (CAPD)

http://www.icudelirium.org/pediatric.html

Please answer the following questions based on your interactions with the patient over the course of your shift:						
	Never 4	Rarely 3	Sometimes 2	Often 1	Always 0	Score
1. Does the child make eye contact with the caregiver?						
2. Are the child's actions purposeful?						
3. Is the child aware of his/her surroundings?						
4. Does the child communicate needs and wants?						
	Never 0	Rarely 1	Sometimes 2	Often 3	Always 4	
5. Is the child restless?						
6. Is the child inconsolable?						
7. Is the child underactive—very little movement while awake?						
8. Does it take the child a long time to respond to interactions?						
					TOTAL	

Who to screen

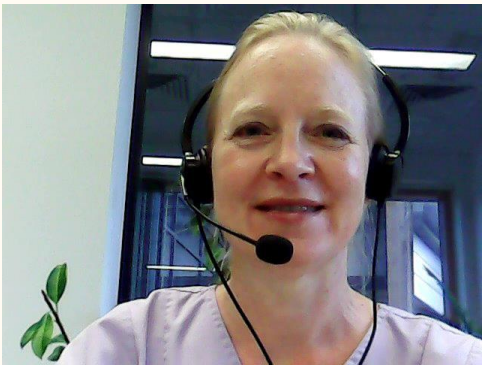
- Critically ill children
- All ages and developmental stages
- Uncooperative patients

When to screen

- Towards the end of each nursing shift, after sufficient interactions with the awake patient, upon which to base an assessment

When not to screen

- Deep sedation or comatose (COMFORT-B ≤11)
- Muscle-relaxed



Traube C, Silver G, Kearney J, Patel A, Atkinson TM, Yoon MJ, et al. Cornell Assessment of Pediatric Delirium: A Valid, Rapid, Observational Tool for Screening Delirium in the PICU. Critical Care Medicine. 2014 Mar;42(3):656–63.

Performing a CAPD screen

Eight behaviours observed over a shift.
Score how frequently each occurs.
Sum the item scores.

	Never 4	Rarely 3	Sometimes 2	Often 1	Always 0	Score
1. Does the child make eye contact with the caregiver?						
2. Are the child's actions purposeful?						
3. Is the child aware of his/her surroundings?						
4. Does the child communicate needs and wants?						
	Never 0	Rarely 1	Sometimes 2	Often 3	Always 4	
5. Is the child restless?						
6. Is the child inconsolable?						
7. Is the child underactive—very little movement while awake?						
8. Does it take the child a long time to respond to interactions?						
					TOTAL	

CAPD≥9 suggests delirium

First 4 behaviours
Eye contact
Purposeful actions
Awareness
Communicates needs and wants

Never	4
Rarely	3
Sometimes	2
Often	1
Always	0

Scoring reverses

Last 4 behaviours
Restless
Inconsolable
Underactive
Slow to respond

Never	0
Rarely	1
Sometimes	2
Often	3
Always	4

The CAPD is designed to work well even in preverbal children

Assess in partnership with parents

Use the Developmental Anchor Points Chart as a reference for different age groups

	NB	4 weeks	6 weeks	8 weeks	28 weeks	1 year	2 years
1. Does the child make eye contact with the caregiver?	Fixates on face	Holds gaze briefly Follows 90 degrees	Holds gaze	Follows moving object/caregiver past midline, regards examiner's hand holding object, focused attention	Holds gaze. Prefers primary parent. Looks at speaker.	Holds gaze. Prefers primary parent. Looks at speaker.	Holds gaze. Prefers primary parent. Looks at speaker Figure0002
2. Are the child's actions purposeful?	Moves head to side, dominated by primitive reflexes	Reaches (with some discoordination)	Reaches	Symmetric movements, will passively grasp handed object	Reaches with coordinated smooth movement	Reaches and manipulates objects, tries to change position, if mobile may try to get up.	Reaches and manipulates objects, tries to change position, if mobile may try to get up and walk
3. Is the child aware of his/her surroundings?	Calm awake time	Awake alert time Turns to primary caretaker's voice May turn to smell of primary care taker	Increasing awake alert time Turns to primary caretaker's voice May turn to smell of primary care taker	Facial brightening or smile in response to nodding head, frown to bell, coos	Strongly prefers mother, then other familiars. Differentiates between novel and familiar objects	Prefers primary parent, then other familiars, upset when separated from preferred care takers. Comforted by familiar objects especially favorite blanket or stuffed animal	Prefers primary parent, then other familiars, upset when separated from preferred care takers. Comforted by familiar objects, especially favorite blanket or stuffed animal
4. Does the child communicate needs and wants?	Cries when hungry or uncomfortable	Cries when hungry or uncomfortable	Cries when hungry or uncomfortable	Cries when hungry or uncomfortable	Vocalizes /indicates about needs, e.g., hunger, discomfort, curiosity in objects, or surroundings	Uses single words or signs	3 to 4 word sentences, or signs. May indicate toilet needs, calls self or me
5. Is the child restless?	No sustained awake alert state	No sustained calm state	No sustained calm state	No sustained awake alert state	No sustained calm state	No sustained calm state	No sustained calm state
6. Is the child inconsolable?	Not soothed by parental rocking, singing, feeding, comforting actions	Not soothed by parental rocking, singing, feeding, comforting actions	Not soothed by parental rocking, singing, feeding, comforting actions	Not soothed by parental rocking, singing, comforting actions	Not soothed by usual methods, e.g., singing, holding, talking	Not soothed by usual methods, e.g., singing, holding, talking, reading	Not soothed by usual methods, e.g., singing, holding, talking, reading (may tantrum, but can organize)
7. Is the child underactive—very little movement while awake?	Little if any flexed and then relaxed state with primitive reflexes (Child should be sleeping comfortably most of the time)	Little if any reaching, kicking, grasping (still may be somewhat discoordinated)	Little if any reaching, kicking, grasping (may begin to be more coordinated)	Little if any purposive grasping, control of head and arm movements, such as pushing things that are noxious away	Little if any reaching, grasping, moving around in bed, pushing things away	Little if any play, efforts to sit up, pull up, and if mobile crawl or walk around	Little if any more elaborate play, efforts to sit up and move around, and if able to stand, walk, or jump
8. Does it take the child a long time to respond to interactions?	Not making sounds or reflexes active as expected (grasp, suck, moro)	Not making sounds or reflexes active as expected (grasp, suck, moro)	Not kicking or crying with noxious stimuli	Not cooing, smiling, or focusing gaze in response to interactions	Not babbling or smiling/laughing in social interactions (or even actively rejecting an interaction)	Not following simple directions. If verbal, not engaging in simple dialogue with words or jargon	Not following 1–2 step simple commands. If verbal, not engaging in more complex dialogue

Anchor points

New born, 4 weeks, 6 weeks, 8 weeks, 28 weeks, 1 year, 2 years

New born patient		One year old patient
Fixates on face	*Eye contact*	Holds gaze. Prefers primary parent. Looks at speaker
Moves head to side, dominated by primitive reflexes	*Purposeful actions*	Reaches and manipulates objects, tries to change position, if mobile may try to get up
Calm, awake time	*Awareness*	Prefers primary parent, then other familiars, upset when separated from preferred care takers. Comforted by familiar objects (blanket, toys)
Cries when hungry or uncomfortable	*Communicate needs and wants*	Uses single words, or sings
No sustained awake alert state	*Restless*	No sustained calm state
Not soothed by parental rocking, singing, feeding, comforting actions	*Inconsolable*	Not soothed by usual methods (singing, holding, talking, reading)
Little if any flexed and then relaxed state with primitive reflexes	*Underactive*	Little if any play, efforts to sit up, pull up, and if mobile crawl or walk around
Not making sounds or reflexes active as expected (grasp, suck, Moro)	*Slow to respond*	Not following simple directions. If verbal not engaging in simple dialogue with words or jargon

Behavioural signs of delirium

Hypoactive delirium in a 14 month old.

CAPD items			
1	Eye contact	5	Restless
2	Purposeful actions	6	Inconsolable
3	Aware of surroundings	7	Underactive
4	Communicate needs and wants	8	Slow to respond

Remember

Who needs to be screened for delirium?

Every patient every shift

That means day of admission and day of discharge.

(Except children with COMFORT-B ≤11)