
Why does Delirium matter in post op patients?

Increased stay.....

SCIENTIFIC ARTICLES

Health Economic Implications of Perioperative Delirium in Older Patients After Surgery for a Fragility Hip Fracture

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One hundred and sixteen (48%) of the 242 patients developed perioperative delirium during their stay in the hospital.

Compared with patients with no delirium, delirium was associated with a mean incremental total length of hospital stay of 7.4 days

Increased mortality....

Open Access Research

BMJ Open

Delirium as a predictor of mortality in US Medicare beneficiaries discharged from the emergency department: a national claims-level analysis up to 12 months

Juhi Israni, Adriane Lesser, Tyler Kent, Kelly Ko

Over time, delirium was consistently associated with increased mortality risk compared with controls up to 12 months (HR 2.07; 95% CI 2.01 to 2.13).

Covariates that affected mortality included older age, comorbidity and presence of dementia.

Common to all specialities...

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Incidence and Risk Factors for Delirium in Elderly Patients with Critical Limb Ischaemia

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Risk factors;

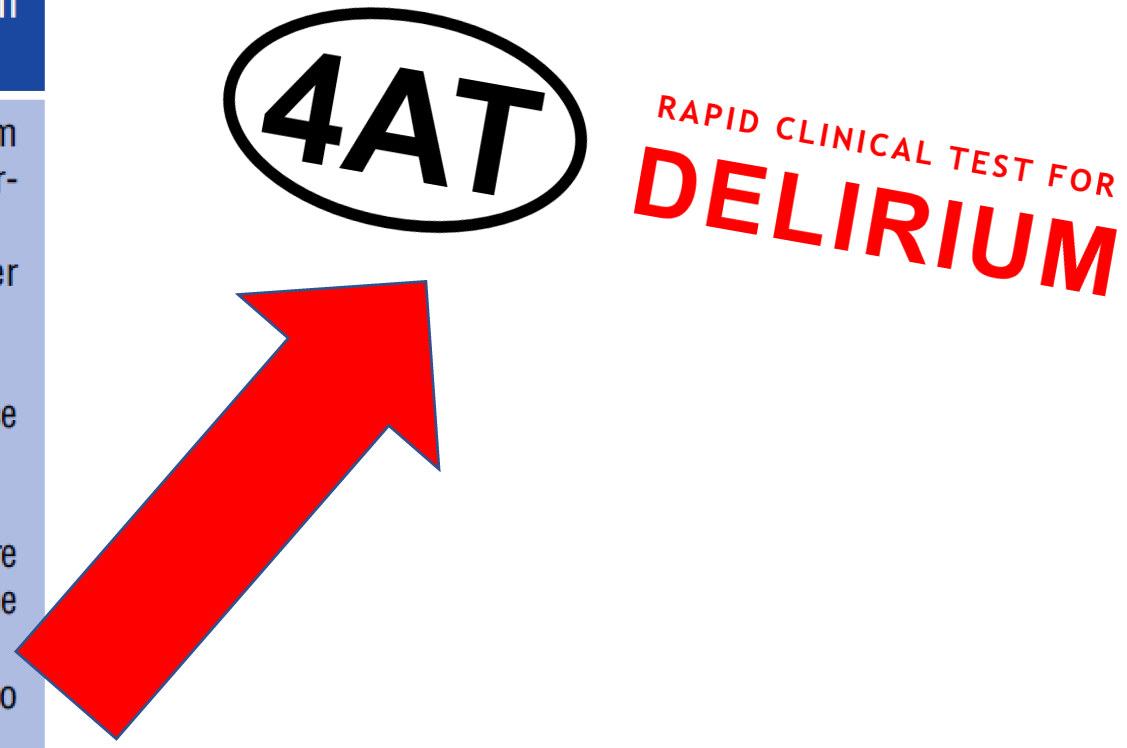
- **Age**
- **Operation time**
- **WCC >10.0**
- **Urea > 7.5**
- **Immobility**
- **Prior cognitive dysfunction**
- **Blood transfusions**
- **Presence of urinary catheter**
- **Opioid analgesia**

"Doctor. Ms X seems a bit agitated!"

Box 1 Standard interview questions for researchers with nursing staff to elicit delirium

I have just interviewed__ and I wonder if you could help me form an opinion as to whether he/she has been experiencing delirium or confusion.

1. How many days approximately have you been looking after __?
2. Do you think he/she is delirious or acutely confused?
3. Has there been a sudden change in __'s mental state since coming into hospital?
   a. If so, when did you notice this change?
4. Do you think he/she is able to focus well when you are talking to him/her or does he/she tend to ramble off the point?
5. Does he/she seem better at any period in the day compared to other times?
6. Has__ 's level of consciousness been altered at all—has he/she been drowsy or not interacting, or perhaps hyperaware at times?



The 4AT is a validated screening tool for delirium- which relates to the DSM-V criteria for delirium

ALERTNESS

AMT4

ATTENTION

ACUTE CHANGE

4AT tool (circle score in each section on right and total score)		Circle
Alertness: this includes patients who are markedly drowsy (e.g. difficult to rouse and/or obviously sleepy during assessment) or agitated/hyperactive. Observe the patient if asleep, attempt to wake. Ask patient to state name and address to assist rating.	Normal (fully alert, but not agitated, throughout assessment) Mild sleepiness for <10 secs after waking then normal Clearly abnormal	0 0 4
AMT4 (age, D.O.B, place (hospital), current year)	No mistakes 1 mistake ≥2 mistakes/untestable	0 1 2
Attention: Ask the patient: "please tell me the months of the year in backwards order, starting at December."	Achieves 7 months or more correctly Starts but scores <7 months/refuses to start Untestable (cannot start because unwell, drowsy, inattentive)	0 1 2
Acute change or fluctuating course: Evidence of significant change or fluctuation in alertness, cognition, other mental function (e.g. paranoia, hallucinations) arising over the last 2 weeks and still evident in last 24 hours.	No Yes	0 4
	Total	

DSM-5*

The presence of delirium requires all the criteria to be met:

- Disturbance in attention and awareness
- Disturbance develops acutely and tends to fluctuate in severity
- At least one additional disturbance in cognition
- Disturbances are not better explained by a preexisting dementia
- Disturbances do not occur in the context of a severely reduced level of arousal or coma
- Evidence of an underlying organic cause or causes

POST-OPED

PAIN

ORAL INTAKE/NUTRITION

SUGARS

TESTS

ORAL HYGIENE

POST-OP NAUSEA

ELIMINATION (INC DRAINS)

DELIRIUM

ELDERLY PATIENT RETURNED FROM SURGERY?

Have they been POST-OPED?

PAIN- Are they on appropriate analgesia? Regular/PRNs? What is the source of the pain?

- How much PRN are they using? Would they benefit from a PCA?
- Do they need a pain team review?

ORAL INTAKE/Nutrition- Is there a food chart? Do they have **IV fluids prescribed**? Are they known to dietetics?

- Do they need **Ensures/NG/PEG/TPN?**
- Significant **anaemia?** B12/Folate, Iron studies

SUGARS- Are they diabetic? Any Hyper/hypo BMs?

- Review regular insulins and Diabetic drugs.

TESTS- What post op investigations have been done?

- **Review the bloods**
  - Any AKI? Any Electrolyte abnormalities?
  - Anaemia?
  - Any cultures/swabs/PCRs awaited?
- Any post op imaging to request/review?
  - Suspect infection? Collections? Drains dislodged?

ORAL HYGIENE- Dentures clean? Brushing? Dry/Ulcered lips? Mouth sponges needed?

POST-OP NAUSEA- Anti-eimetics prescribed? Regular? PRN? IV + PO?

- What is the source of the nausea?

ELIMINATION-

- Catheter in place? Check their Input/output.
- Retention? Do a bladder scan.
- Review all drain sites. Output? Erythema/pus/pain?
- Bowels moving? Stool Chart, regular laxatives, IV fluids.

DELIRIUM- DO A POST-OP 4AT

Compare to their admission 4AT, get a collateral history.