What is Cognitive Impairment?

A change in a person's ability to think... affecting their

• Communication
• Attention
• Memory
• Problem solving

*NOT a normal part of aging*
## Dementia/Delirium/Depression

<table>
<thead>
<tr>
<th></th>
<th>DURATION OF</th>
<th>ONSET</th>
<th>PROGRESSION</th>
<th>MEMORY LOSS</th>
<th>CONFUSION</th>
<th>CONSCIOUSNESS</th>
<th>THOUGHTS</th>
<th>LANGUAGE</th>
<th>SLEEP</th>
<th>ACTIVITIES OF DAILY LIVING</th>
<th>PERCEPTION</th>
<th>RESPONSE TO QUESTIONS</th>
<th>CONCERN RE: SYMPTOMS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Months, years</td>
<td>Insidious</td>
<td>Irreversible</td>
<td>Short-term</td>
<td>Chronic</td>
<td>Alert</td>
<td>Slow, perseveration</td>
<td>Usually preserved</td>
<td>Disturbed with wandering</td>
<td>Poor performance</td>
<td>Visual hallucinations</td>
<td>Tries but fails</td>
<td>Minimal</td>
</tr>
<tr>
<td></td>
<td>Minutes, hours, days</td>
<td>Abrupt</td>
<td>Reversible if treated</td>
<td>Global</td>
<td>Acute</td>
<td>Fluctuating</td>
<td>Paranoid, bizarre</td>
<td>Abnormal</td>
<td>Disturbed with confusion</td>
<td>Fluctuates</td>
<td>Visual /auditory hallucinations</td>
<td>Misinterprets</td>
<td>Ignored</td>
</tr>
<tr>
<td></td>
<td>Weeks, months</td>
<td>Recent or recurrent</td>
<td>Reversible i/c relapse</td>
<td>Islands of loss (s/t, l/t)</td>
<td>Variable</td>
<td>Alert, ? withdrawn</td>
<td>Preoccupied, slow</td>
<td>Preserved</td>
<td>Early wakening</td>
<td>Variable</td>
<td>Uncommon</td>
<td>“I don’t know”</td>
<td>Exaggerated</td>
</tr>
</tbody>
</table>

What does delirium look like?

- Hyperactive
- Hypoactive
- Mixed
Risk factors for delirium

- Age - 65 years of age and over (45 years ATSI)
- Pre-existing cognitive impairment/concerns
- Visual impairment (can lead to sensory deprivation)
- Depression
- Hip # OR Post ICU/CCU
- Adding 3 or more new medications
- Severe medical illness
- Sleep deprivation
Delirium

Early identification and treatment improves outcomes.

1 in 4 Acute/1 in 7 sub-acute

Prevention is better than cure

Delirium is a MEDICAL EMERGENCY
Delirium - Causes

- Always has a medical cause; examples:
  - infections
  - metabolic disturbances
  - acute cardiac or pulmonary conditions
  - renal failure
  - constipation
  - trauma
  - drug toxicity or withdrawal (includes alcohol)
  - post anaesthesia
Negative outcomes of delirium

- Falls
- Pressure injuries
- Cognitive impairment/functional decline

Increased:
- Length of hospital stay
- Risk of residential placement
- Mortality
COGNITIVE IMPAIRMENT - CARE AND RECOGNITION

IDENTIFY IF CLIENT HAS A COGNITIVE IMPAIRMENT

BE AWARE OF DELIRIUM RISK
For clients who meet ANY of the following criteria:
- Age ≥ 65 (≥ 45 ATSI)
- Known cognitive impairment or cognitive concerns
- Severe medical illness

IF CLIENT BEHAVIOUR OR COGNITION CHANGES

If ABLE Screen for Delirium using 4AT Tool or local assessment tool and record score

Obtain history on recent events/changes from other staff and family/friends
Consider Single question in Delirium (SQID) – Do you think (name…) is more confused lately?

4AT = 0-3
AT RISK/POSSIBLE COGNITIVE IMPAIRMENT

4AT = ≥ 4 OR -ve SQID
POSSIBLE DELIRIUM

LOW RISK

RED ALERT – ASSESS & MANAGE DELIRIUM
NOTIFY MEDICAL OFFICER/Refer client for medical review +
FOLLOW PROCEDURES - Recognising and Responding to Acute Deterioration AND Cognitive Impairment – Assessment & Management +
ADDRESS SYMPTOMS: Responsive Behaviour Management +
PREVENT COMPLICATIONS e.g. Falls & Pressure Injuries

AMBER ALERT – KEEP SAFE, ASSESS COGNITION AND PREVENT DELIRIUM
P – PAIN: assess/review/relieve
I – INFECTION source: treat
T – THIRST: give fluids
C – CONSTIPATION: avoid/treat
H – HUNGER: monitor nutrition
E – ENVIRONMENT: clutter free
D – DRUGS: review medications +
Ensure appropriate walking aids
Use of hearing and visual aids
Engage in meaningful activity

IF ANY CHANGES IN BEHAVIOUR OR CONDITION REPEAT DELIRIUM SCREEN

NO ALERT – AVOID COGNITIVE IMPAIRMENT ALL CLIENTS
Promote functional independence
Involve in exercise and functional activity
Ensure adequate nutrition and hydration
Promote sleep and rest
Educate and involve Client and family/carer

IMPLEMENT PATIENT FOCUSED NON-PHARMACOLOGICAL INTERVENTIONS
EDUCATE PATIENT, FAMILY AND CARER
IMPLEMENT PHARMACOLOGICAL INTERVENTIONS ONLY WHEN PATIENT/OTHERS AT RISK OF HARM
Information for prescribers – If medication is required for the safety of the patient/other people, view further prescribing guidance at aTG complete

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Screening for Cognitive Impairment

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- Age ≥ 65 (≥ 45 ATSI)
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Screening for Cognitive Impairment

If ABLE Screen for Delirium using 4AT Tool or local assessment tool and record score

+/-

Obtain history on recent events/changes from other staff and family/friends
Consider Single question in Delirium (SQID) – Do you think (name…) is more confused lately?
Single Question in Delirium (SQuiD): testing its efficacy against psychiatrist interview, the Confusion Assessment Method and the Memorial Delirium Assessment Scale

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Abstract

In this paper, we address the research question: How sensitive is a single question in delirium case-finding? Of 32 'target admissions', consensus was obtained for 31 patients. The single question: 'Do you think [name of patient] has been more confused lately?' was put to 32 friends or family. Results of the Single Question in Delirium (SQuiD) were compared to psychiatrist interview (MAP) which was the reference standard. The Confusion Assessment Method (CAM) and two other tools were also applied. Compared with 0%, the SQiD achieved a sensitivity of 98% (95% CI: 89-100%) and a specificity of 27% (95% CI: 12.4-47.8%). The CAM demonstrated a positive predictive value (PPV) of 98% (98-100%) and a negative predictive value (NPV) of 5% (2-9%). A kappa correlation of 0.81 (95% CI: 0.75-0.87). In our hospital, the CAM had a kappa value of 0.37 (95% CI: 0.25-0.50). The MAP had a kappa value of 0.77 (95% CI: 0.71-0.83). A further important finding in our study was that the CAM had only 47% sensitivity in the hands of minimally trained clinicians. Conclusions: The SQiD demonstrates potential as a simple clinical tool worthy of further investigation.

Keywords: cancer, case-finding, delirium, oncology, palliative, screening tools

Introduction

Delirium is prevalent in hospitalized patients (15-20% of geriatric hospital admissions).1 It is more prevalent in the last year of life (at least 35% up to 60%) or women and prerequisite in many cases.2,12 Delirium is associated with increased mortality, morbidity,3-7 prolonged hospital stay11 and has negative effects on personal and professional care.7 Prevention and management of delirium is usually identified as an intervention that prevents illness.8 Validated tools are available to aid detection in clinical and research settings.9,10 Despite this however, the diagnosis of delirium is often missed. There is an urgent need to find practical methods of improving delirium detection.11

A 2001 study comparing structured screening to clinical detection of delirium by nurses found that 69% of cases were missed.12 Pick-up rates can be improved considerably by using delirium screening tools, but these tools currently available require at least 90 minutes of clinician time per patient.10

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Screening for Cognitive Impairment
Identifying patient status

4AT = ≥ 4 OR +ve SQID
POSSIBLE DELIRIUM

4AT = 0-3
AT RISK/POSSIBLE COGNITIVE IMPAIRMENT

LOW RISK

RED ALERT
AMBER ALERT
NO ALERT
Management of delirium

RED ALERT – ASSESS & MANAGE DELIRIUM

NOTIFY MEDICAL OFFICER/seek Medical review

FOLLOW PROCEDURES – Recognising and Responding to Acute Deterioration AND Cognitive Impairment – Assessment & Management

CONSIDER TRANSFER OF CARE/REFERRAL TO ANOTHER SERVICE PROVIDER
PREVENTING DELIRIUM

AMBER ALERT – KEEP SAFE, ASSESS COGNITION AND PREVENT DELIRIUM

P – PAIN: assess/review/relieve
I – INFECTION source: treat
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E – ENVIRONMENT: clutter free
D – DRUGS: review medications
+
Ensure appropriate walking aids
Use of hearing and visual aids
Engage in meaningful activity

BEHAVIOUR SUPPORT PLAN & FAMILY/CARER EDUCATION

IF ANY CHANGES IN BEHAVIOUR OR CONDITION REPEAT DELIRIUM SCREEN

Preventing delirium
Preventing cognitive impairment

NO ALERT – AVOID COGNITIVE IMPAIRMENT ALL CLIENTS

- Promote functional independence
- Involve in exercise and functional activity
- Ensure adequate nutrition and hydration
- Promote sleep and rest
- Encourage family/carer involvement
Responsive behaviours

- Agitation/screaming
- Apathy
- Aggression
- Cursing/swearing
- Restlessness/wandering
- Sexual disinhibition
- Anxiety
- Depressive mood
- Sleep disturbances
- Psychosis (delusions, hallucinations)

CAUSED BY
- Delirium
- Pain
- Depression
- Environmental
- Medication
- Infection
- Dehydration
- Constipation
Managing responsive behaviours

BEHAVIOURAL SUPPORT

+ Non-Pharmacological strategies
- Communication strategies
- Environmental strategies
- Clinical practice strategies
More information

QHEPS – COMMUNITY AND ORAL HEALTH PAGES

- Cognitive Impairment Procedure
- Cognitive Impairment patient information booklet
Conclusion

- KNOW WHO IS AT RISK & SPOT DELIRIUM
- THINK DELIRIUM: RE-SCREEN IF ANY CHANGES
- REPORT/TREAT AND MANAGE - KEEP SAFE!
- NON-PHARMACOLOGICAL STRATEGIES FIRST
- ANTI-PSYCHOTICS AS A LAST RESORT
- FAMILY INVOLVEMENT SUPPORT/EDUCATION