

Guidelines for the Diagnosis and Management of Acute Confusion (delirium) in the Elderly

Author: Madeleine Purchas (SpR Care of the Elderly)

Consultant Supervisor: Dr Neil Pollard

Date: 16th Dec 2005

Aims / background of guidelines

These guidelines are intended to provide practical guidance for medical and nursing staff on wards to improve medical care of older patients with acute confusion.

Acute confusion / delirium is common (present in 20% of patients on admission / develops in 25% of in-patients) and serious (increased morbidity and mortality, length of stay). Patients with acute confusion are often disruptive for staff and other patients.

Definition

Delirium (acute confusional state) is characterised by a **disturbance of consciousness** and a **change in cognition** that develop over a **short period of time**. The disorder has a tendency to fluctuate during the course of the day, and there is evidence from the history, examination and investigations that the delirium is a direct consequence of a **general medical condition, drug withdrawal or intoxication** (DSM IV) (3).

The diagnosis requires all 4 criteria in the DSM IV definition. Delirium is often not recognised and a high index of suspicion is required.

Subtypes:

Hyperactive delirium – restless, agitated, delusional, risk of harm

Hypoactive delirium – lethargic, monosyllabic, often overlooked

Mixed type.

History

If it is not possible to obtain a history from the patient, a collateral history should be sought from a relative / carer. Pick up the phone if necessary!

The 'poor historian' is you.

In addition to standard questions in the history, the following information should be specifically sought:

1. Previous intellectual function
2. Functional status (eg. Mobility, transfers, toileting/bathing, aids used)
3. Onset and course of confusion
4. Previous episodes of acute or chronic confusion
5. Sensory deficits – hearing, sight, speech
6. Symptoms suggestive of underlying cause (eg. infection)
7. pre-admission social circumstances / care package
8. Full drug history including non-prescribed drugs
9. Alcohol history

Examination

A full examination should be carried out including in particular the following areas:

1. Neurological examination (however, if they can comply with a full neuro, delirium is unlikely!)
2. Conscious level (Glasgow Coma Scale)
3. Evidence of pyrexia
4. Evidence of alcohol abuse or withdrawal
5. **Cognitive function** using a standardised tool (AMTS – see box below)
6. BM test

Abbreviated mental test score (AMTS)

1. Age (exact only)
2. Date of birth (date and month)
3. Time (to nearest hour)
4. Year (exact only)
5. Name of hospital
6. Address for recall at end of test (e.g. 42 West street)
7. Recognition of 2 persons (e.g. doctor, nurse)
8. Year of 1st world war
9. Name of present monarch
10. Count backwards 20-1

Investigations

The following investigations are almost always indicated in patients with acute confusion in order to identify the underlying cause:

1. Full Blood Count, CRP
2. Calcium
3. Urea and electrolytes
4. Liver function tests
5. Glucose
6. Thyroid function tests
7. Chest Xray
8. ECG
9. Blood cultures
10. Urinalysis / MSU

Other investigations may be indicated according to the findings from the history and examination:

1. CT scan (e.g. if focal neuro signs, confusion developing after head injury or fall, raised ICP)
2. B12 and folate
3. Arterial blood gases
4. Specific cultures (MSU, sputum)
5. Lumbar Puncture (if meningism or headache and fever)

Diagnosis

The main differential diagnoses are **dementia, depression**

Identification of underlying cause/ precipitating factors

Delirium is a **non-specific sign** of illness in a vulnerable group of patients. Therefore **any** illness can give rise to acute confusion.

Predisposing factors: Age, frailty, sensory impairment, dementia

Medical treatment

1. Where possible **withdraw or reduce any drugs** causing confusion
Common culprits include: benzodiazepines, tricyclic antidepressants, anticholinergics (oxybutinin), antiparkinsonian medication, opiate analgesics, steroids, antipsychotics, digoxin (dose related).
2. **Correct biochemical** derangements
3. If there is a high likelihood of **infection** (eg. Abnormal urinalysis or CXR), treat promptly with appropriate antibiotics
4. Relieve **exacerbating symptoms** (pain, retention, constipation, thirst)
5. **Avoid** major **tranquillisers** where possible
6. Monitor **AMTS**
7. **Communicate** with the relatives

If unsure if medication contributing to confusion, please ask pharmacist for advice.

Management on the ward

1. Good lighting levels
2. Repeated orientation (clocks, calendars, newspapers, familiar objects)
3. Repeated reassurance, ideally by the same person (consider 'specialling')
4. Sensory aids where necessary (glasses, hearing aids)
5. Avoidance of physical, emotional or chemical restraints
6. Minimal distractions, calm environment (consider side room)
7. Approach and handle gently
8. Avoid multiple ward transfers
9. Maintenance / restoration of normal sleep patterns
10. Encouraging visits from familiar friends / family (and 'distraction therapists')

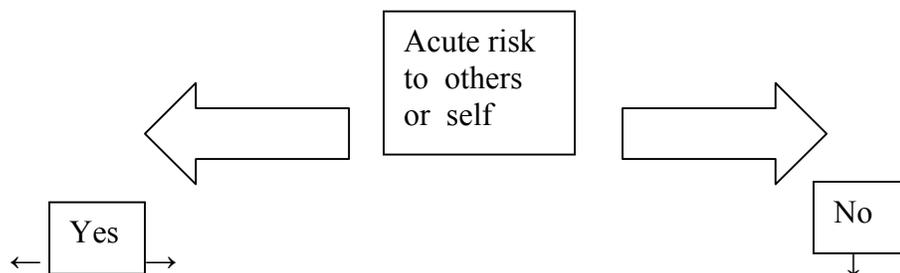
Please refer to the guidelines for the use of minimal restraint in older patients.

Sedation

Sedation should be **avoided if at all possible**. They cause worsening of confusion and increase risk of falls. However it may be necessary in the following circumstances:

1. In order to carry out essential investigations/treatment
2. To prevent patients endangering themselves or others
3. To relieve distress in highly agitated or hallucinating patients

Wandering is **not** an indication for drug treatment. Decision to treat should be multidisciplinary. Document appropriately in notes.



Paranoid/
Delusional

Lorazepam
0.5 – 1mg po

Haloperidol
0.5mg BD po
up to 1mg BD
(IM 2.5mg)
(second line)

Restless/
irritable

Lorazepam
0.5 - 1mg po
up to 2mg/24 hrs
(IM same dose)

Non-urgent treatment of
agitation/aggression

Night-time disturbance:
Zopiclone 3.75-7.5mg
Trazodone 50mg (titrate)

Delusions/hallucinations:

Lorazepam 0.5- 1mg po
Haloperidol 0.5mg po

Beware Parkinsonian patients, Lewy Body dementia (Haloperidol contraindicated)

The golden rules:

1. Review medication every 24 hours.
2. Start with low doses.
3. Discontinue sedation as soon as possible.
4. Avoid polypharmacy.
5. If in doubt, ask for advice.

Where to ask for help

Geriatrician of the day / Care of the elderly consultant referral
Beverly Chapman, psychogeriatric liaison nurse
Psychogeriatric consultant referral
Eldercare pharmacist (Lorraine Launchbury)
Ward pharmacist

You may also get additional information about the patient from the community psychiatric nurses, if the patient is known to them.

References

1. Guidelines for the diagnosis and management of delirium in the Elderly, BGS compendium, second edition
2. Levkoff S, Cleary P. Epidemiology of delirium: an overview of research issues and findings. *Int Psychogeriatrics* 1991;3(2):149-167
3. American Psychiatric Association: diagnostic and statistical manual of mental disorders, fourth edition, Washington, D.C., American psychiatric association, 1994
4. Jitapunkul S, Pillay I, Ebrahim S. The abbreviated mental test: its use and validity. *Age and ageing*; 1991;20:332-336
5. Rockwood K. Acute confusion in elderly medical patients. *JAGS* 1989;37:150-154