Prevention, Diagnosis and Management of Delirium – Summary Guideline

Reference No: CG-T/2014/024

Delirium (acute confusional state) is a common clinical syndrome characterised by a disturbance of consciousness and a change in cognition, which has an acute onset and fluctuating course. Classified as a medical emergency, delirium is a serious condition often associated with poor outcomes.

Delirium may be reversible if dealt with urgently and up to 40% of delirium is preventable. It is present on admission in 10-20% of acute medical admissions and develops in a further 10-20% during their hospital stay. Post-operative delirium is common on surgical wards, particularly following neck of femur fractures.

A Collateral history from a relative or carer of the onset and course of the confusion is essential to distinguish delirium from dementia. It can be difficult to distinguish between delirium and dementia and some people may have both conditions. If clinical uncertainty exists over the diagnosis, the person should be managed initially for delirium.

Types of delirium
There are three types of delirium: hyperactive, hypoactive and mixed delirium. Be particularly vigilant for behaviour indicating hypoactive delirium (marked*). Hypoactive delirium accounts for up to 80% of cases, although often goes undetected.

Diagnosis
This can include:

- Worsened concentration*
- Slow responses*
- Confusion
- Restlessness, agitation
- Visual or auditory hallucinations
- Reduced mobility*
- Changes in appetite*
- Sleep disturbance
- Lack of co-operation
- Withdrawal, alterations in mood or communication*

Usually there is evidence of a causative general medical condition, drug withdrawal or intoxication.

Minimum Delirium Screen:	Referral criteria for Mental Health Liaison Team (through Extramed for RDH and Meditech for QHB, SJ & SRP)
• Collateral history to assess cognitive baseline • NEWS2 review • Blood and urine cultures, U&Es, LFTs, TFTs, FBC, CRP, ABG, Folate/B12, blood glucose • Consider: Bladder scan, PR, ECG, CXR, (CT brain if trauma, stroke risk factors, focal neurology)	• Challenging behaviour • Persistent delirium • Uncertain capacity • Past psychiatric history • Suspected dementia/depression • Considering use of Mental Health Act

Cognitive testing is advised on patients aged >65 on admission to hospital. Screening tools may increase recognition of delirium present on admission. To screen for delirium use the 4AT – Rapid clinical test for delirium: 4AT - RAPID CLINICAL TEST FOR DELIRIUM

For ICU patients use the CAMICU: Link for ICU patients dosing (as per ICU guidelines).

Management and Prevention of Delirium

Multi-component interventions have been shown to reduce the incidence and severity of delirium among those at high risk.
Non-pharmacological interventions remain the preferred clinical option in the first instance.

P	**Pain**	Assess for verbal and non-verbal signs of pain, particularly in patients with communication difficulties - inadequate treatment of pain can cause delirium
		Commence pain relief and review appropriate management of pain
I	**Infection**	Assess and treat for infection
		Take regular observations, assess for hypoxia and optimise oxygen saturation if necessary
N	**Nutrition**	Assess, monitor and document nutrition status involving the Dietitian where relevant
		If the patient has dentures, ensure they fit properly
C	**Constipation**	Attention to bowel and bladder. Avoid unnecessary catheterisation.
		Use a stool chart to keep track of bowel motions
H	**Hydration**	Avoidance of dehydration. Consider sub-cutaneous or intravenous fluids if necessary
		Seek advice re people with heart failure or chronic kidney disease
M	**Medication**	Carry out a medication review, considering the type and number of medications (including over the counter medications)
		Establish usual alcohol and nicotine intake. Consider Nicotine patches
	Mobility	Encourage safe mobilisation where possible, particularly after surgery. Walking aids should be accessible
		Avoid use of physical restraints
E	**Electrolytes**	Review blood tests
	Environment	Good lighting levels
		Reduced noise (pump alarms, pagers)
		Available and working sensory aids (spectacles, hearing aids, deaf aid communicators).
		Avoid movements between wards and rooms and where possible ensure continuity of care from familiar staff
		Regular and repeated visible and verbal reorientation (clocks, calendars and clear signs)
		Maintenance or restoration of normal sleep patterns whilst avoiding sedatives, sleep kits available on Net-i
		Reduce nursing/medical interventions during sleeping hours
		Encourage visits from family and friends

Pharmacological management of patients with delirium (for patients over 65 years)

The management of delirium is primarily non-pharmacological: treat the cause, discontinue exacerbating drugs and use de-escalation and non-verbal techniques.

Sedation can increase the risk of falls and associated morbidity and mortality.

- Haloperidol can increase the risk of stroke and is **contraindicated** in patients with Parkinson's Disease, Dementia with Lewy Bodies and patients with prolonged QTc on 12 lead ECG. Review most recent ECG prior to use.
- Lorazepam can paradoxically increase confusion.

Sedation may be necessary in the following circumstances:

- To carry out lifesaving / critical investigation or treatment
- To prevent patients endangering themselves or others when non-pharmacological methods have not been effective
- To relieve distress in a highly agitated or hallucinating patient

If sedatives are prescribed, the drug should be given regularly from the outset (not prn), reviewed daily, and discontinued as soon as possible. MAXIMUM OF 3 DAYS*

Aim to use oral medication first:

1st line: HALOPERIDOL (see contraindications above)
500micrograms to 1mg BD
*If additional doses are needed, this can be given four hourly, up to a MAXIMUM of 2mg/day**

2nd line (1st line for patients with Parkinson's Disease):
LORAZEPAM
500micrograms to 1mg BD
*If additional doses are needed, this can be given two hourly, up to a MAXIMUM of 2mg/day**

If a second line agent is needed for a patient with Parkinson's, Quetiapine 12.5mg every 4 hours can be started and specialist input should be sought (maximum 50mg/day if >65 years).

If needed, a combination of antipsychotic and lorazepam can be used.

If it is not safe to administer treatment orally, IM injection can be used:

- Haloperidol (see contraindications) IM 500micrograms to 1mg, maximum 2mg/day
- Lorazepam IM 500micrograms to 1mg, maximum 2mg/day

* SpR/Consultant advice should be sought if there is a need to prescribe more than 2 doses

Agitated patients need continuous clinical observation

If agitation is unresolved:

- Seek advice from Mental Health Liaison Team, SpR/Consultant.
- Reconsider non-pharmacological measures
- Review identified causes of delirium
- Review regular medications

Monitoring for patients with:

Decreased level of consciousness

- 1:1 nursing
- Continuous oxygen saturations
- HR, Rhythm, BP, RR & Neuro obs every 15mins until clinically stable

Alert and Calm

- 30mins observations for 2 hours after last sedative

Please consult Prevention, Diagnosis and Management of Delirium - Full clinical guideline

DRUGS USED FOR THE ACUTE MANAGEMENT OF DELIRIUM ARE TEMPORARY. PATIENTS SHOULD BE WEANED AT EARLIEST OPPORTUNITY AND NOT BE ON THE DISCHARGE PRESCRIPTION