

MANAGEMENT OF DELIRIUM IN PALLIATIVE CARE GUIDELINES

Five sentence summary:

- Screen all to identify early
- Treat reversible causes (up to 50% is reversible)
- Use supportive measures as first line
- Medications only for severe distress
- Educate families, reassure staff

INTRODUCTION

Delirium is present in up to 4/10 of patients admitted to the hospice setting and is a common factor in poor outcomes.

More importantly delirium is a cause of significant distress and suffering to patients and their families.

The aetiology of delirium can be wide due to the heterogeneity of the palliative care population, but a systematic approach helps to identify reversible causes.

There is no specific medication treatment for delirium and evidence shows better outcomes with non-pharmacological treatment. The use of anti-psychotic medications has been recommended and reserved for treatment of severe distress and behavioural disturbance related to delirium.

A landmark randomised control trial published in 2017 by Agar et al (1) showed that the use of anti-psychotic medications compared to placebo in delirium, was not useful in reducing symptoms in patients receiving palliative care.

Reversibility of delirium is seen in up to 50% of patients (2) therefore:

- 1) Early identification (Screening + Aetiology Assessment)
- 2) Treatment of underlying precipitants (Manage reversible causes)
- 3) Provision of evidence based supportive measures

Will reduce suffering and distress in palliative care patient with delirium

These guidelines aim to summarise current evidence and provide clear direction in investigating and managing patients identified as having a diagnosis of delirium in the hospice setting.

ACH DELIRIUM FRAMEWORK



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DELIRIUM IDENTIFICATION – THE SIXTH VITAL SIGN

Recognising Active Delirium as part of your Routine (RADAR) is the tool that will be used by nurses at ACH during their medication round to screen and identify patients with a potential diagnosis delirium.

It asks:

Was the patient drowsy? (hypo-alert showing a decreased level of consciousness)

Did the patient have trouble following instructions? (Inattention plus hypervigilance/psychomotor agitation)

Were the patient’s movements slowed down? (psychomotor restriction)

This tool identifies patients with inattention and decreased conscious state with likely disturbances in cognition.

DELIRIUM DIAGNOSIS

Delirium is an acute global dysfunction of cerebral function or “acute brain failure” due to a multitude of causes.

Clinically it is an **acute** disorder of:

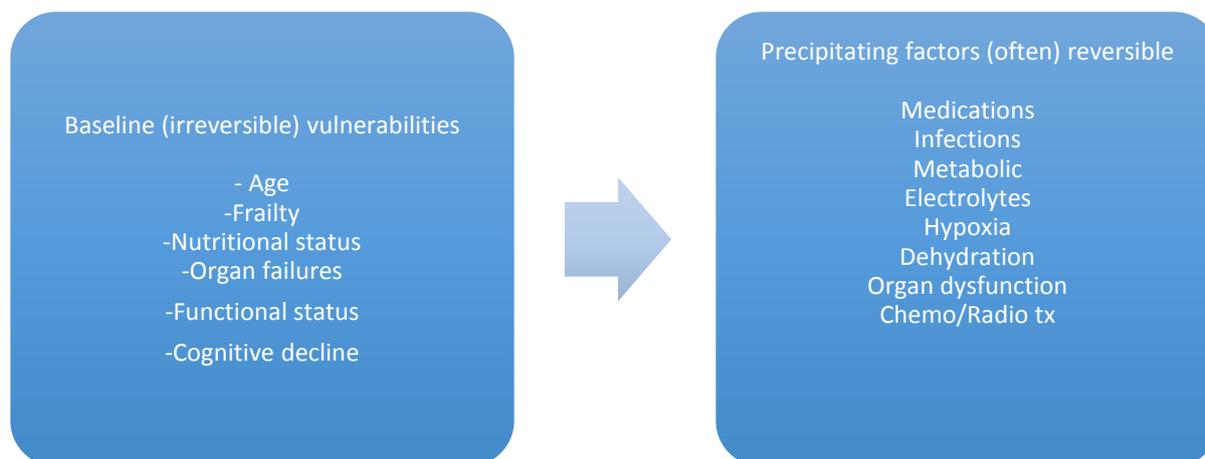
- 1) Attention– reduced ability to focus, sustain and shift attention
- 2) Cognition – altered ability of higher order function
- 3) Consciousness – Decreased or hypervigilance (psychomotor disturbance) (3)

ASSESSMENT OF AETIOLOGY

Once diagnose assess treatable precipitating factors considering:

Patient’s baseline vulnerability potentially predisposes to delirium.

Precipitating factors are often present and reversible, one study showed a median of 3 in advance cancer patients (4).



Medications: Opiates, benzodiazepines, anti-cholinergics, anti-psychotics/depressants, anti-convulsants, steroids

Infection: Pneumonia, urinary tract infection, cellulitis, sepsis

Metabolic/Electrolytes: hypercalcaemia, hyponatraemia, hypokalaemia, thiamine deficiency

Organ failure/dysfunction: hepatic, renal, cardiac, bone marrow -> anaemia

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Endocrine: hypoglycaemia, hypothyroidism, hypoadrenalism

CNS disorders: Stroke, tumour, metastases, infection, vasculitis

MANAGEMENT OF DELIRIUM

The central strategy in managing patients with delirium in palliative care patients is:

- 1) Treating the reversible cause (precipitating factors)
- 2) Non-pharmacological interventions

Pharmacological therapies in the form of antipsychotic medications has been routinely used in the treatment of delirium, with recent research showing limited usefulness in patients receiving palliative care in reducing symptoms.

It is reserved as a second line treatment for delirium in patients experiencing significant distress and suffering.

Multi-component Non-Pharmacological Management of delirium

Targeting risk factors for delirium with interventions can help prevent delirium in older patients and provide a framework of non-pharmacological strategies for palliative care patients. (5) (6)

NON-PHARMACOLOGIC INTERVENTIONS (5-6)

Vision/Hearing - minimise sensory deficits with aids for hearing and vision

Hydration - Encourage oral intake of fluids

Sleep deprivation – Sleep enhancement protocol to Re-introduce sleep-wake cycle with reduction in stimuli at night and relaxation techniques

Cognitive dysfunction – Orientation with board and clear communication with daily schedule

Medication review and de-prescribing (4)

Medications are a common precipitant of delirium due to altered pharmacodynamics and kinetics in elderly, frail and patients with organ dysfunction

Consider de-prescribing deliriogenic medications: benzodiazepines, antidepressants, antipsychotics, anticonvulsants, corticosteroids and quinolones.

Education to family

Allow family to stay, reassure and reduce anxiety in patient. Provide education around characteristics of delirium, treatment and be responsive to concerns and questions.

PHARMACOLOGICAL MANAGEMENT

The aim of medications used in delirium is to control agitation, anxiety, aggression, delusions and hallucinations. They are used as a second line treatment.

Agar et al in 2017 published first RCT that showed limited effectiveness of antipsychotics (haloperidol + risperidone) in reducing symptoms of delirium compared to placebo.

Cochrane review in 2012 similarly concluded there was insufficient evidence to recommend the role of drug therapy in the treatment of delirium at the end of life. (7)

Using antipsychotics should thus be carefully considered and used in severe distress.

Importantly the symptoms of delirium must be monitored daily and antipsychotic dose reduced if symptoms resolve.

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Initially:

Haloperidol remains drug of choice (First generation – Typical Antipsychotic and highest D2 receptor blockade) (8-9)

- > 0.5mg oral/subcutaneous in the evening, then 0.5-1mg every 4hours, maximum 5mg/day

Extrapyramidal side effects must be monitored: dystonia, akathisia +/- agitation/restlessness. Watch use in patients with Parkinson's disease

Patients unable to tolerate haloperidol:

Risperidone (Second generation – Atypical Antipsychotic high D2 blockade)

-> Risperidone 0.25mg to 1mg daily to twice daily as required

Olanzapine (Second generation Atypical antipsychotic)

-> 2.5 to 5mg daily to twice daily as required

Patients with severe agitation (anxious, restless, aggressive and a harm to themselves and others)

Benzodiazepines can help in the short term but are strongly associated with precipitating and worsening delirium and must be used cautiously with continual rationalisation.

Midazolam -> 1-5mg subcutaneously

Lorazepam -> 0.5 to 1mg oral or sublingual up to four times a day (Maximum 4mg/day)

PALLIATIVE SEDATION

Palliative sedation should be considered for delirium that is refractory and irreversible, which is causing significant suffering for families and patients in the terminal phase.

Delirium in dying patients is a poor prognostic sign and judicious and proportionate use of sedative medications will facilitate a peaceful death, reducing family distress (3) (4)

Palliative sedation is the intentional administration of sedatives to reduce consciousness in the terminal phase.

Commonly used medications are Midazolam, Propofol and Phenobarbital.

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