

## Barwon Health Delirium Guideline

### Risk Factors for Delirium

Premorbid Risk factors Assessment	Tick	Precipitating factors	Tick
Visual Impairment	<input type="checkbox"/>	Physical Restraint	<input type="checkbox"/>
Severe Illness	<input type="checkbox"/>	Malnutrition	<input type="checkbox"/>
Cognitive screening	<input type="checkbox"/>	3 medications added in 24 hours	<input type="checkbox"/>
	<input type="checkbox"/>		<input type="checkbox"/>
Dehydration	<input type="checkbox"/>	IDC	<input type="checkbox"/>
	<input type="checkbox"/>	Iatrogenic event (eg transfusion, procedure)	<input type="checkbox"/>
1-2 Present medium risk of delirium	<b>Total</b>	1-2 Present medium risk of delirium	<b>Total</b>
>3 High risk of delirium		>3 High risk of delirium	

### Prevention of Delirium

**Objective: Identify Cause and treat, Keep patient safe : if untreated, mortality is high**

<b>Hydration and Nutrition</b>	Preparative hydration – IV fluids Early recognition of dehydration and volume repletion with encouragement of oral intake or IV fluids	Referral: Dietitian
<b>Cognitive Impairment</b>	Establish baseline, discuss with family and carers Orientation protocol, diversional therapy Repeat cognitive function tests if change	Referral: Occupational therapy Diversional Therapist
<b>Immobility</b>	Ambulation or Active range of movement 3 times daily Avoid immobilising equipment eg restraint or bladder catheters	Referral: Volunteers Physiotherapy
<b>Bowel and Bladder</b>	Bowel chart, monitor for constipation	
<b>Sleep</b>	Avoid use of unnecessary hypnotics Non pharmacological sleep protocol Sleep enhancement programme	
<b>Sensory</b>	Be aware elderly patients may have poor hearing and eyesight. Ensure sensory aids are well fitting and in good repair: hearing aids, Glasses, dentures Check Ears for wax	Referrals: Speech therapy Audiology
<b>Environment</b>	Familiar objects, natural light/window where possible Stable room temperature: 21°C – 24°C TV or Radio, large face clock, newspapers Consider single room Adequate lighting : 40-60 Watt night light Reduced Noise: <45 decibels (day); <20 decibels (night)	
<b>Language</b>	If English is not primary language	Referral: Interpreter

### Assessment of patients with Delirium

	Step 1	Step 2	Step 3	Step 4
<b>Physical Assessment</b>	<b>History (CAM)</b> <ul style="list-style-type: none"> <li>• Acute onset</li> <li>• Fluctuating Course</li> <li>• Disorganised thinking</li> <li>• Altered level of consciousness</li> </ul>	<b>Examination</b> – Physical including vital signs – neurological, PR examination, bladder scan and O <sub>2</sub> Sats	Review of medical records	Medication Review <sup>1</sup> And if >5 medications
<b>Mental Assessment</b>	Interview patient and family	Cognitive Testing <ul style="list-style-type: none"> <li>• AMTS</li> <li>• MMSE</li> </ul>		.
<b>Investigations</b>	FBE, Glucose Electrolytes, LFTs Urinalysis Calcium	Blood Gases if post operative Thyroid Function Test	Chest x-ray	ECG
<b>Additional</b>	CT/MRI brain <sup>2</sup> see criteria Additional EEG if indicated	Urine culture and sensitivity Blood Cultures Lumbar Puncture	Serum levels of medication	

<sup>1</sup> Common medications that may cause or worsen cognitive problems include Tricyclic antidepressants, SSRIs, MAO inhibitors, neuroleptics, anti-Parkinson medication, anticholinergics, Benzodiazepines, antihistamines, Opioid analgesics and Quinolone antibiotics.

<sup>2</sup> Any sudden or recent change in mental state, unless dementia is well established, recent onset of focal neurological signs, documented fall with significant injury, patient on anticoagulation especially with history of trauma.

## Treatment of Patients with Delirium

**Objective: Identify Cause and treat, Keep patient safe**

<b>Hydration and Elimination</b>	Bowels – assess constipation Urinary Output – urine dilute and odourless
<b>Drug Management</b> <b>Adequate Pain Management</b>	Ensure adequate pain relief without overdose Regular analgesia preferable Pharmacology review
<b>Benzodiazepine/alcohol withdrawal</b>	Oxazepam /Valium Protocols Consult Psychiatric liaison
<b>Environmental Factors</b>	As per prevention protocol
<b>Family</b>	Reassure and educate family, friends and the patient. Encourage family to reassure the patient Fear Reducing Conversation
<b>Support and Education</b>	Orientate patient, Reassure Patient, Community clearly and concisely, touch

## Management of Confusion

<b>Behavioural Management</b>	Behavioural Charts for 3 days, then assess with Geriatrician Liase with psychiatrist or Aged Psychiatry Service (Phone 52267044)	
<b>Communication</b>	Documentation and reporting	
<b>Geriatric Assessment</b>	Consultation	Review
<b>Psychiatric assessment and treatment</b>	Consultation	Review
<b>Injury Prevention</b>	Falls prevention Avoid physical restraint	Monitor, review daily
<b>Wandering Agitated and Aggressive Patient</b>	Promote patient safety and self control Staff attitude of calmness and comforting behaviour Calm voice, careful touch. Orientate patient to IV line other tubing. Do not confront arguing patient Careful listening to hallucination – identify item in surrounding that may be misunderstood.	
<b>Management of hypoalert patient</b>	Psychiatric Review Exclude Depression Pressure Care Management and Bowel management Prevent deconditioning, mobilisation or active range of movement	
<b>Intense Rehabilitation</b>	Commence immediately post operative. Develop appropriate activities for mental and physical capacity.	
<b>Drug Management</b>	<ul style="list-style-type: none"> <li>• <b>If oral medication tolerated:</b> <ul style="list-style-type: none"> <li>– Olanzapine 2.5mg once daily as first line (Can be increased to 5mg once daily)</li> <li>– Risperidone 0.5mg increase up to 1 mg bd (Increase should be slow, ie every two days)</li> <li>– Haloperidol 0.25mg – 4mg orally up to 4 times daily. (max dose 10mg) (Initial dose can be repeated every 4 hours until response is seen, then continue with suitable bd/ tds dose)</li> </ul> </li> <li>• <b>If Parenteral medication required:</b> <ul style="list-style-type: none"> <li>– Haloperidol 0.25mg initially in older frailer patients up to 5 mg IM in younger patients (&lt;60 years of age) repeat after 20 mins. If no response after 20 minutes, increase to 0.5mg, 1mg, 2.5mg. 5mg after each 20 minutes up to a total of 10mg) Initial dose can be given as slow I.V. injection in ICU</li> <li>– Benzodiazepine use in alcohol and benzodiazepine withdrawal Sedation may paradoxically increase agitation</li> </ul> </li> </ul> <p style="text-align: center;"><b>PATIENT MUST HAVE DAILY MEDICAL AND MEDICATION REVIEW</b></p>	