Part II: Assessment and Management of Delirium in Older Adults

Non-pharmacological management of delirium:
1. Treat underlying predisposing/predisposing causes
2. Avoid all contributing causes.
3. Withhold all drugs (or taper when possible) if not available or not suitable (use benzodiazepines if use could be toxic).
4. Use multidisciplinary teams
5. Provide for safety using the least restrictive measures.
6. Use re-orientation strategies (e.g., clocks, calendars).
7. Provide appropriate lighting to reduce misinterpretations and promote sleep.
8. Use clear and simple communication. Avoid confrontation and use distraction to minimize agitation.
9. Encourage the presence of a family member if possible.
10. Ensure the environment is safe for the patient and caregivers.
11. Support normal sleep patterns and avoid the routine use of sedatives.
12. Promote high nutrient foods
13. Provide the older person and family with ongoing information about delirium.

Environmental considerations
A) for patients in significant distress due to the symptoms of delirium:
B) in order to carry out essential investigations or treatment; and/or
C) to prevent older delirious persons from wandering or prevent falls is not justified.

To reduce the patient's agitation, use behavioural management strategies to identify triggers and to remove or prevent habits if not harmful.

Communication/behavioural management
- To reduce the patient's agitation, use behavioural management strategies to identify triggers and to modify as indicated.
- Provide for safety using the least restrictive measures.
- Use re-orientation strategies (e.g., clocks, calendars).
- Provide appropriate lighting to reduce misinterpretations and promote sleep.

Pharmacological management of delirium
- Use the psychopharmacologic agents to treat the symptoms of delirium should be reserved:
  1. A) for patients in significant distress due to the symptoms of delirium:
     a) for patients in significant distress due to agitation or psychotic symptoms;
     b) in order to carry out essential investigations or treatment; and/or
     c) to prevent older delirious persons from wandering or prevent falls.
  2. In patients with delirium causing agitation or psychotic symptoms; and/or
     a) using psychotropic medications for management of the behaviour; and/or tapering as soon as possible.
  3. Antipsychotics are the treatment of choice. Haloperidol, when used appropriately, is a reasonable choice for most patients.
  4. Use of antipsychotics is alternative agents to haloperidol, and are preferred for patients who also have Parkinson's Disease or Lewy Body Dementia.

Provide object familiar to the older person to reduce agitation and for others.
- Ensure the environment is safe for the patient and for others.

Psychotropic medications commonly used in treating the symptoms of delirium:

<table>
<thead>
<tr>
<th>Drug Class</th>
<th>Examples</th>
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</thead>
<tbody>
<tr>
<td>Antipsychotics</td>
<td>Quetiapine 12.5 mg - 50 mg po od</td>
</tr>
<tr>
<td>Antipsychotics</td>
<td>Olanzapine 1.25 mg - 2.5 mg po od</td>
</tr>
<tr>
<td>Antipsychotics</td>
<td>Haloperidol 0.25 mg - 0.5 mg po od-bid</td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td>Lorazepam 0.5 mg - 2.0 mg po</td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td>Clonazepam 0.5 mg - 3.0 mg po</td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td>Tolvaptan 10 mg - 20 mg po</td>
</tr>
</tbody>
</table>

5. Baseline and follow-up ECG recommended with antipsychotics. For prolactin of 45 IU/L, or 450 IU/L or a 22% increase over baseline, antipsychotic discontinuation.
6. Benzodiazepines can exacerbate delirium. Their use should be reserved for older persons with delirium caused by withdrawal from alcohol/ sedative hypnotics.

Select high-risk medications:
- Psychotropic medications
- Anticholinergics (e.g., benztropine)

Drug Class
- Antipsychotics
- Benzodiazepines
- Anticholinergics
- Barbiturates
- Benzodiazepines
- Sedative - hypnotics
- Histamine-2 blockers
- Narcotics
- Anticonvulsants
- Dopamine agonists
Delirium subtypes:

- **Hyperactive:** patients with this subtype are irritable, agitated, hyperactive delirium, hallucinations, and can be aggressive.
- **Hypotensive:** patients with this subtype appear apathetic, lethargic, drowsy, sluggish, disoriented, and withdrawn, due to multiple etiologies, or from other causes.
- **Mixed:** patients with this subtype present with a mixture of hyperactive and hypoactive characteristics.

Subsyndromal Delirium (SSD): This is a condition in which a patient has one or more of the symptoms of delirium but does not meet the full criteria of a DSM-defined delirium. Their outcomes are intermediate between those with full delirium and those without delirium. Research suggests that patients with subsyndromal delirium require careful monitoring.

Interventions to prevent delirium:

1. Avoid inappropriate or unnecessary medications.
2. Use a standardized and staged approach to control pain, with judicious analgesic prescription.
3. Support normal sleep patterns and avoid the routine use of sedatives.
4. Provide reorientation and/or cognitively stimulating activities.
5. Provide supplemental oxygen for hypoxia.
6. Promote early detection and management of post-operative complications.
7. Provide adequate nutritional intake.
8. Avoid/discontinue inappropriate or unnecessary medications.
9. Encourage mobility.
10. Follow a least restraint approach to minimize the use of restraints.
11. Ensure adequate hydration and normal sleep patterns.
12. Use a standardized and staged approach to control pain, with judicious analgesic prescription.

Screening instruments:

- The Confusion Assessment Method (CAM) is recommended as a delirium screening instrument. It is a brief, bedside questionnaire or suggested assessment tools that can be used by health care providers with appropriate training include:
  - To provide information to help inform the completion of the Mini-mental Status Exam (MMSE)
  - To measure the severity of delirium or to monitor its course
  - Delirium Index
  - The Confusion Assessment Method (CAM): Core features of delirium based on
  - Consciousness
  - Disorganized thinking
  - Inattention
  - Fluctuating course
  - Altered level of consciousness:
    - Overall, what is the patient's level of consciousness:
      - Does the patient:
        - Have difficulty keeping track of what is happening around them?
        - Become easily distracted?
      - Is there evidence of an acute change in mental status from patient baseline? Does the abnormal behaviour:
        - Have a fluctuating course?
        - Have a duration of less than 1 week?
    - For example, does the patient have:
      - Rambling speech/irrelevant conversation?
      - Unclear or illogical flow of ideas?
      - Incoherent speech?

Confusion Assessment Method (CAM): Scoring Tool for Delirium (in summary)

1. Delirium is a common and serious condition encountered in medical settings.
2. Delirium often is not recognized or is misdiagnosed.
3. Confusion Assessment Method (CAM) is a useful tool for the detection of delirium.
4. The use of a standardized and staged approach to control pain, with judicious analgesic prescription.
5. Interventions to prevent delirium must be evidenced-based and collaborative.
6. Systematic screening and/or prompt assessment of delirium is often not recognized or is misdiagnosed as dementia or depression.
7. Awareness of delirium, its potentially modifiable risk factors is key to prevention and management.
8. The use of a standardized and staged approach to control pain, with judicious analgesic prescription.
9. The Confusion Assessment Method (CAM): Scoring Tool for Delirium is a summary tool for the diagnosis of delirium by CAM requires the presence of BOTH: core features. To measure the severity of delirium or to monitor its course:
   - Delirium Index S:9:9
   - Delirium Index D:
     - The Clinical Institute Withdrawal Assessment for Alcohol (CIWA-Ar)
     - The General Index to assess alcoholic withdrawal: Delirium for Alcohol (CAW-Ar)
   - The General Index to assess alcoholic withdrawal: Delirium for Alcohol (CAW-Ar)