### Delirium

**Definition**
Delirium is a medical emergency characterized by a core symptom of disturbed consciousness such as poor environmental awareness and decreased attention. Accompanying symptoms include changes in cognition (memory loss, language disturbance, and disorientation) and/or perceptual disturbances, such as visual illusions or hallucinations.

Co-existing dementia greatly increases risk of delirium.

**Onset**
- Sudden onset: Hours to days
- Recent unexplained changes in mood that persist for at least 2 weeks
- Gradual deterioration over months to years

**Course**
- Often reversible with treatment
- Slow, chronic progression, and irreversible

**Thinking**
- Fluctuations in alertness, cognition, perceptions, thinking
- Reduced memory, concentration and thinking, low self-esteem

**Psychotic Feature**
- Visual illusions, misperceptions, and hallucinations
- Delusions of poverty, guilt, somatic symptoms

**Sleep**
- Disturbed but with no set pattern. Differs night to night
- Disturbed
- May be disturbed with an individual pattern occurring most nights

**Mood**
- Fluctuations in emotions – outbursts, anger, crying, fearful
- Depressed mood
- Diminished interest or pleasure
- Changes in appetite (over or under eating)

**Psychomotor Activities**
- Hyperactive delirium: agitation, restlessness, hallucinations
- Hypoactive delirium: unarousable, very sleepy
- Mixed delirium: combination of hyperactive and hypoactive manifestations

**Screening Tools**
- **Confusion Assessment Method (CAM)** – An algorithm used to screen for delirium: Screen for delirium is positive if the person has features 1 & 2 plus either 3 or 4 as listed below.
  1. Presence of acute onset and fluctuating

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### Depression

**Definition**
Depression is a term used when a cluster of depressive symptoms (see DSM-V criteria) is present on most days, for most of the time, for at least 2 weeks and when the symptoms are of such intensity that they are out of the ordinary for that individual.

Depression is a biologically based illness that affects a person’s thoughts, feelings, behavior, and even physical health.

**Onset**
- Recent unexplained changes in mood that persist for at least 2 weeks

**Course**
- Usually reversible with treatment
- Often worse in the morning
- Often worse in the morning

**Psychotic Feature**
- Signs may include delusions of theft/persecution and/or hallucinations depending on type of dementia.

**Sleep**
- Disturbed morning awakening or hypersomnia

**Mood**
- Depressed mood especially in early dementia
- Prevalence of depression may increase in dementia; however, apathy is a more common symptom and may be confused with depression

**Psychomotor Activities**
- Hyperactive: agitated depression
- Hypoactive: withdrawn, decreased motivation/interest

**Screening Tools**
- **Geriatric Depression Scale (GDS)** Interpretation of the 15 question screen:
  - < 4 = Indicates absence of significant depression
  - 5-7 = Indicates borderline depression
  - > 7 = Indicates probable depression

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<thead>
<tr>
<th>Saint Louis University Mental Status (SLUMS) Useful in identifying individuals with mild cognitive impairment or early dementia</th>
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<tbody>
<tr>
<td>27-30 = normal</td>
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<td>21-26 = mild impairment</td>
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### Dementia

**Definition**
Dementia is a gradual and progressive decline in mental processing ability that affects short-term memory, communication, language, judgment, reasoning, and abstract thinking.

Dementia eventually affects long-term memory and the ability to perform familiar tasks. Sometimes there are changes in mood and behavior.

**Onset**
- Gradual deterioration over months to years

**Course**
- Slow, chronic progression, and irreversible

**Thinking**
- Cognitive decline with problems in memory plus one or more of the following: aphasia, apraxia, agnosia, and/or executive functioning

**Psychotic Feature**
- Signs may include delusions of theft/persecution and/or hallucinations depending on type of dementia.

**Sleep**
- May be disturbed with an individual pattern occurring most nights

**Mood**
- Depressed mood especially in early dementia
- Prevalence of depression may increase in dementia; however, apathy is a more common symptom and may be confused with depression

**Psychomotor Activities**
- Wandering/exit seeking or
- Agitated or
- Withdrawn (may be related to co-existing depression)
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<th>Delirium</th>
<th>Depression</th>
<th>Dementia</th>
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<tr>
<td>course AND 2. Inattention AND EITHER 3. Disorganized thinking OR 4. Altered level of consciousness</td>
<td>Patient Health Questionnaire (PHQ-9) Interpretation of the 9 question screen: 1-4 = Minimal depression 5-9 = Mild depression 10-14 = Moderate depression 15-19 = Moderately severe depression 20-27 = Severe depression</td>
<td>1-20 = dementia</td>
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<td>Assess for causes: • I WATCH DEATH [Infections, Withdrawal, Acute metabolic, Toxins/drugs, CNS pathology, Hypoxia, Deficiencies, Endocrine, Acute vascular, Trauma, Heavy metals]</td>
<td>Assessment of Suicide Risk in the Older Adult (critical if depression is present and/or history of depression) If coexisting dementia, consider using Cornell Scale for Depression in Dementia</td>
<td>Montreal Cognitive Assessment (MoCA) Interpretation of Score: Add one point for an individual who has 12 years or fewer of formal education, for a possible maximum of 30 points. A final total score of 26 and above is considered normal. If behavioral issues, consider using Cohen-Mansfield Agitation Inventory (CMAI)</td>
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<td>Laboratory Tests Delirium workup may include the following tests: • CBC with differential, electrolytes, liver and kidney function, UA with culture, serum albumin and glucose, MMA, ammonia, TSH, O2 sats, ABG levels, CXR, ECG, Alcohol and toxicology screen</td>
<td>Depression workup includes the following tests: • TSH, B12, folate, Ca, Albumin, FBS, Ferritin, Iron, Hgb, K, ESR</td>
<td>Dementia workup includes the following tests: • CBC, TSH, MMA, serum calcium, liver and kidney function, homocysteine, blood glucose, electrolytes, HIV, and serologic test for syphilis (selectively)</td>
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<td>DSM-V Criteria Diagnostic Criteria: A. Disturbance of consciousness (i.e, reduced clarity of awareness of the environment) with reduced ability to focus, sustain or shift attention. B. A change in cognition (such as memory deficit, disorientation, language disturbance) or the development of a perceptual disturbance that is not better accounted for by a preexisting, established or evolving dementia. C. The disturbance develops over a short period of time (usually hours to days) and tends to fluctuate during the course of the day. D. There is evidence from the history, physical examination or laboratory findings that the disturbance is caused by the direct physiological consequences of a general medical condition.</td>
<td>Diagnostic Criteria: Five (or more) of the following symptoms have been present during the same two-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure. 1. depressed mood most of the day, nearly every day 2. marked diminished interest or pleasure in normal activities 3. significant weight loss or gain 4. insomnia or hyperinsomnia nearly every day 5. psychomotor agitation or retardation nearly every day 6. fatigue or worthlessness or excessive guilt 7. diminished ability to think or concentrate, or indecisiveness 8. recurrent thought of death or suicidal thoughts/actions</td>
<td>Diagnostic Criteria: A. The development of multiple cognitive deficits manifested by both 1. memory impairment (impaired ability to learn new information or to recall previously learned information). 2. one or more of the following cognitive disturbances: a) aphasia (language disturbance) b) apraxia (impaired ability to carry out motor activities despite intact motor function) c) agnosia (failure to recognize or identify sensory function) d) disturbance in executive functioning B. The cognitive deficits in the above criteria (Criteria A1 and A2) each cause significant impairment in social or occupational functioning and represent a significant decline from a previous level of functioning.</td>
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