UTI Program

Causes of delirium and mental status changes

A core practice of the Urinary Tract Infection Program is reinforcing the accepted clinical signs and symptoms of a urinary tract infection. Delirium* is no longer an accepted clinical sign. This resource will help health care providers identify and consider the many potential causes of delirium.

*Delirium: A new (acute) and fluctuating syndrome of impaired attention and awareness.¹

Causes of Delirium in the Elderly (DELIRIUMS Acronym)

D

- Dehydration
- Depression
- Drugs
  - New drug, increased dose or drug interaction. Including but not limited to:
    - Narcotics/opioids (especially meperidine [Demerol])
    - Benzodiazepines
    - Corticosteroids
    - Drugs with “anticholinergic” properties (effects may be additive), such as antihistamines (e.g., diphenhydramine [Benadryl]); hydroxyzine (Atarax); dimenhydrinate (Gravol); diphenoxylate/atropine (Lomotil); some antidepressants (e.g., amitriptyline, nortriptyline, desipramine, imipramine, doxepin, paroxetine); ranitidine (Zantac); muscle relaxants (e.g., cyclobenzaprine [Flexeril], methocarbamol); antipsychotics (e.g., clozapine, olanzapine, quetiapine); bladder agents (e.g., oxybutynin, tolterodine, darifenacin, solifenacin); benztrapine; amantadine; carbamazepine, etc.
    - Anti-seizure medications
    - Digoxin if drug levels are too high
    - Multiple medications; multiple psychoactive drugs
    - Drug withdrawal (e.g., sedatives/benzodiazepines, alcohol, nicotine, some antidepressants)
**E**
- Electrolyte abnormalities (hypo-/hypernatremia [low or high serum sodium], hypo-/hypercalcemia [low or high serum calcium])
- Endocrine disorders (e.g., thyroid or adrenal dysfunction)
- ETOH (alcohol) and other drug withdrawal

**L**
- Liver failure

**I**
- Infections (especially respiratory, skin, urinary tract)
- Impaired oxygenation (e.g., from exacerbations of chronic obstructive pulmonary disease, congestive heart failure, myocardial infarction)

**R**
- Renal failure
- Retention of urine or stool (constipation)
- Recent change in surroundings or emotional stress

**I**
- Immobilization (catheters or restraints)
- Injuries
- Increased pressure in the brain (intracranial)

**U**
- Untreated/undertreated pain

**M**
- Metabolic disorders (e.g., hypo-/hyperglycemia [low or high blood sugar levels], hypo-/hyperthermia [low or high body temperature])
- Malnutrition (including thiamine, folate or B12 deficiency)

**S**
- Sleep deprivation
- Sensory impairment (hearing or vision—e.g., lack of/ill-fitting hearing aids or glasses)
- Stroke
Reference


Other Sources


Contact

This resource is part of Public Health Ontario’s UTI Program.

For more information please visit www.publichealthontario.ca/UTI or email ipac@oahpp.ca.