



**Medical
Blueprints**

POSTOPERATIVE DELIRIUM: LOWER YOUR RISK REPORT #2807

BACKGROUND: Delirium is a disturbance in mental abilities that results in confused thinking and reduced awareness of the environment. The start of delirium happens within hours or a few days. It can often be traced to one or more contributing factors, such as a severe or chronic illness, changes in metabolic balance, medication, infection, surgery, or alcohol or drug intoxication or withdrawal. Delirium usually occurs in two forms. There is a hyperactive form in which patients are agitated, have increased arousal, or are very vigilant. Then, there is a hypoactive form in which patients are lethargic, sleepy, move less than usual, and have little awareness of their surroundings. For older adults in the hospital, delirium is one of the most common complications that can happen during a medical illness or following an operation. Approximately one-third of patients over age 70 who are in the hospital experience delirium, and about 15-25% of older people experience delirium after major elective surgery.

(Source: <https://www.mayoclinic.org/diseases-conditions/delirium/symptoms-causes/syc-20371386> and <https://www.healthinaging.org/a-z-topic/delirium/basic-facts>)

DIAGNOSIS AND TREATMENT: The diagnosis of delirium requires a patient interview, a physical examination, cognitive testing, and a review of the medical chart. One of the most widely used screening tools is the confusion assessment method (CAM), validated in various settings, including intensive care units, emergency departments, and nursing homes. Treatment with medication can be an option if nonpharmacological strategies cannot prevent aggression or severe agitation and patient or staff safety is threatened. Medication is also an option if there is sleep-wake disturbance or psychosis. There have been several studies looking at the effects of melatonin on the prevention of delirium. However, the evidence is weak that melatonin is effective for the prevention of delirium. It has a good safety profile and may be a reasonable choice to start in hospitalized patients at high risk for delirium, or in established delirium as a sleep aid.

(Source: <https://bcmj.org/articles/delirium-older-adults-diagnosis-prevention-and-treatment>)

RESEARCH ON NEW APPROACHES: The Hospital Elder Life Program (HELP), developed by Sharon Inouye, MD, a professor at Harvard Medical School and director of the Aging Brain Center at Hebrew SeniorLife's Marcus Institute for Aging Research in Boston, has been shown to lower the incidence of delirium by 40% in hospitalized older adults and reduce the likelihood of cognitive and functional decline, as well as to reduce hospital length of stay. The ABCDEF Bundle, developed by E. Wesley Ely, MD, a professor at Vanderbilt University School of Medicine in Nashville, has been found to significantly lower the incidence of delirium, increase survival, and reduce ICU readmission, among other outcomes. These interventions include having a volunteer, staff, or family member present during recovery to help orient and talk to a patient, making sure a patient has glasses and hearing aids if needed, allowing uninterrupted sleep, and getting a patient moving as quickly as possible. After surgery, the care team assesses patients for delirium, manages their pain, and tries to avoid certain medications, such as antipsychotics and benzodiazepines, which raise risk for delirium.

(Source: <https://www.nia.nih.gov/news/researchers-test-new-approaches-prevent-delirium-older-adults>)

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