

# Delirium and dementia

This Q&A sheet provides information about what delirium is, and, how it relates to people with dementia. It describes the causes, consequences, diagnosis and management of delirium. This Q&A sheet does not include information about delirium tremens (state of confusion caused by withdrawal from alcohol) or terminal delirium (delirium that may occur in a dying patient).

## What is delirium?

Delirium (or acute confusion) is a serious acute medical condition whereby a person's mental ability is affected. It develops over a short period of time (usually within hours or days) and symptoms tend to fluctuate throughout the day. It is a common condition in older hospitalised people, but it can also occur less commonly in people who are not in hospital. Delirium is potentially preventable in up to two thirds of hospitalised patients and is often treatable if it develops. Delirium causes distress for the person with delirium, their families and treating health care providers.

## How does a delirium present?

Delirium makes it difficult for a person to pay attention or focus. This means that the person is unable to think clearly and may not be able to answer questions or follow a conversation. A person who has delirium will have difficulty understanding what is going on around them, sometimes causing them to hallucinate or become paranoid. Other signs and symptoms of delirium include the following:

- trouble with memory, particularly recent events, orientation, or knowing where one is or who they are or what time of the day it is
- rambling or incoherent speech
- difficulties with perception that is not otherwise accounted for by a pre-existing, established or evolving dementia
- hyperactive delirium – restlessness, agitation, irritability, combative behaviour or hallucinations (seeing or hearing things that are not there) and delusions (falsely believing something is occurring)
- hypoactive delirium – quiet, drowsy and lethargic, this is often missed and is known to have the worst outcomes
- mixed delirium – a mix of both hyperactive and hypoactive symptoms
- disruptions in normal patterns of sleeping and eating

### **What causes delirium?**

Delirium is most commonly due to a medical cause including severe illness, constipation, dehydration, infection, pain, drug effect or withdrawal (especially alcohol and sedative drugs). However, causes of delirium are numerous, complex and often mixed (multifactorial). In some people the cause cannot be identified.

Currently the nature of delirium and what happens in the brain is not fully understood but there is extensive international research being undertaken to unravel this mystery.

### **Who is at risk of developing delirium?**

Pre-existing cognitive impairment such as dementia, and older age, represent the most significant risks for a person developing delirium (up to two-thirds of all people affected by delirium will be in these categories). However, there are an extensive number of risk factors for developing a delirium including severe illness, dehydration, poor eyesight, metabolic disturbances, surgery, certain medications or changes in medications, and use of physical restraints. People who have previously experienced a delirium are also at greater risk of developing a delirium if they become unwell.

## How can delirium be diagnosed?

Diagnosis relies on a history of the course and onset of changes in the person's behaviour and mental state and an assessment which looks for the presence and absence of other certain features. A history from the family or others who know the person is essential and should confirm that there is an acute change from the person's usual mental state and behaviour. The most widely used standardised delirium diagnostic assessment tool used by trained clinicians is the Confusion Assessment Method (CAM) however; there are many other standardised tools available. There is no blood or other laboratory test to diagnose delirium.

## How is a delirium managed?

### 1. Find and treat the cause

Delirium is best managed and complications can be decreased if it is:

- recognised early, and
- the causes are identified and addressed quickly

A comprehensive history and assessment (in consultation with the family) of medical conditions, physical, cognitive, social and behavioural function and other possible causes must be undertaken. Early detection and medical treatment of biological causes will lead to better outcomes for the patient.

### 2. Non-drug management strategies (recommended best practice)

which include:

- Family visits: it is reassuring and calming for a person with delirium to have family or familiar people around. When visiting a person with delirium, bring in personal items that help remind the person of home
- Effective communication, reorientation and reassurance to reduce distress and anxiety: speaking slowly in a calm voice, and reminding the person where they are, and what day it is can help to reduce distress and anxiety
- Ensure that the person with delirium is well hydrated and nourished: encourage and assist them to eat their meals and drink fluids
- Sleep enhancement strategies: including relaxation music
- Ensure that the environment is safe and soothing: remove any sources of excess noise and stimulation

- Provide sensory devices such as glasses or hearing aids if needed: poor eyesight and hearing can make confusion worse
- Review medications by medical personnel
- Regular mobilisation (physical and occupational therapy)

### **3. Drug management strategies**

People with delirium can often be fearful or feel threatened. They may have hallucinations and/or delusions which cause them distress. If the person is distressed or at risk of harming themselves or others, medication is sometimes used. However, routine or continued use of these medications is not recommended and may be harmful for some people, for instance, those with Lewy body disease.

### **4. Preventing complications**

Ongoing management of delirium involves the prevention of harm through risk management strategies (such as falls prevention), and through environmental modifications which enable the provision of safe and supportive care.

## **What is the relevance to people with dementia?**

Delirium and dementia are both disorders where there is broad or widespread (global) cognitive impairment. They can occur separately or at the same time in older people (delirium superimposed on dementia). The presence of dementia makes the brain more susceptible to developing a delirium. Dementia, diagnosed or undiagnosed, increases the risk of developing delirium approximately five-fold.

Although the time course and pattern of symptoms differ, many of the symptoms of delirium and dementia are shared. Consequently, delirium may go unrecognised, even by health care workers. It is usually wrong and very harmful to newly diagnose dementia in a confused (usually older) inpatient, as delirium is often the cause. Attributing the symptoms of delirium to undiagnosed dementia can lead to serious consequences and can delay the treatment of the actual condition. Patients may get incorrectly labelled as having dementia and yet can be near-normal several weeks later. The acute onset and fluctuation of symptoms in delirium usually assists in differentiation, and the input from family or significant others is also important to separate a delirium from an underlying dementia.

Evidence suggests that delirium may hasten cognitive deterioration in people with pre-existing dementia. In later stages of dementia, people frequently develop symptoms similar to a delirium. Additionally, delirium is more common in those with Lewy body disease and is not just a worsening of Lewy body disease symptoms.

### **What are the problems or complications of developing a delirium, if it is not diagnosed and appropriately managed?**

Delirium is often associated with poor outcomes and it is likely that the more severe and longer the episode of delirium, the poorer the outcome. It can have drastic short and long term consequences for the person such as falls, a decline in their physical strength and function, early admission into residential care, increased healthcare utilisation and costs, and increased risk of death. Some people who have had a delirium may never return to their former cognitive or functional capacity. Delirium can reoccur even after a person has returned home.

### **What can families and carers do if they suspect someone they care for has delirium?**

Families and carers should inform health professionals if their loved one or the person they care for is displaying symptoms of delirium, or appears to be acting 'different' to how they normally would. If delirium is suspected, it is important to inform a health professional as soon as possible, because it may be the first and perhaps the only clue to an underlying medical illness or an adverse medication reaction.

Be prepared to report any changes to the doctor that may be relevant including:

- all medications and any that may have been recently started or stopped
- any environmental changes
- any health changes (for example, a change in bowel or bladder habits, pain or fever)

## References

- Nonpharmacological interventions to prevent delirium: an evidence-based systematic review. 2015 Rivosecchi RM, Smithburger PL, Svec S, Campbell S, Kane-Gill SL. **Critical care nurse**, 35:1 (39–49)
- Delirium in elderly patients hospitalized in internal medicine wards. 2014 Fortini A, Morettini A, Tavernese G, Facchini S, Tofani L, Pazzi M. **Internal and emergency medicine**, 9:4 (435–41)
- Delirium in advanced age and dementia: A prolonged refractory course of delirium and lower functional status. 2014 Boettger S, Jenewein J, Breitbart W. **Palliative & supportive care**, (1–9)
- Delirium in elderly people. 2014 Inouye SK, Westendorp RG, Saczynski JS. **Lancet**, 383:9920 (911–22)

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## Further Information

Dementia Australia offers support, information, education and counselling. Contact the National Dementia Helpline on **1800 100 500**, or visit our website at **[dementia.org.au](http://dementia.org.au)**



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