

Recognition, Assessment and Management of Delirium

Aim

To understand what delirium is, why it occurs in patients towards the end of life, how to accurately diagnose it and how to manage it

Objectives

By the end of this presentation you should be able to:

- ▶ Identify features which make you suspect delirium in a patient
- ▶ Use the Confusion Assessment Method (CAM) tool to diagnose delirium
- ▶ Select strategies to manage delirium without medication
- ▶ Identify correct medications to treat delirium
- ▶ Know what to say to patients and families

Background

- ▶ Delirium is a mental disorder caused by dysfunction of the brain in response to illness
- ▶ In palliative patients it is very common (can occur in nearly 90% of patients)
- ▶ It is reversible in 50% of cases
- ▶ Being able to reverse it depends on the ability to correctly diagnose it and treat it correctly

Regional Audit

A regional audit of delirium diagnosis and management in 2016 across the Cheshire and Merseyside region identified common areas where lessons can be learnt to improve practice.

New guidance was created following this audit, and this teaching is part of this guidance to make sure all healthcare professionals know how to diagnose and manage delirium appropriate to their level of confidence and expertise.

Areas we are doing well

- ▶ We are good at assessing patients for reversible causes of delirium
- ▶ We are good at documenting when we have conversations with relatives about patients with delirium
- ▶ We are good at the non-drug management of delirium

Areas for improvement

- ▶ We have not been using a standardised tool to diagnose delirium
- ▶ We are not always using the right medications to treat delirium
- ▶ We are not good at having conversations with patients when they are diagnosed with delirium (or documenting them)

Recognising delirium

Recognising delirium is everyone's job.

Key features which should make you suspect delirium are:

- ▶ Changes in mental function: worsened concentration, slow responses, confusion.
- ▶ Changes in perceptions: hallucinations.
- ▶ Changes in physical function: reduced mobility, reduced movement, restlessness, agitation, changes in appetite, sleep disturbance.
- ▶ Changes in behaviour: lack of cooperation, withdrawal, or alterations in communication.

'Think delirium'

Delirium is easily confused with terminal agitation, but they are treated differently

To avoid patients with delirium getting the wrong treatment, it is important to rule out delirium before giving any treatment.

The Confusion Assessment Method (CAM) tool is the best tool for us to use to correctly diagnose delirium in our patients- see the next slide to see an example. Read it through to make sure you know how to fill it in.

Screening for delirium

Confusion Assessment Method (CAM) Diagnostic Algorithm		Date of Assessment
		Time of Assessment
		Yes or No
1. Acute Onset and fluctuating course? (Acute change in mental status from baseline, fluctuating behavior through the day)		
2. Inattention? (Difficulty focusing attention, easily distracted, difficulty keeping track of what is being said)		
3. Disorganized thinking? (Disorganized or incoherent thinking, rambling or irrelevant conversation, unclear or illogical flow of ideas)		
4. Altered level of consciousness? (This feature is shown by any answer other than 'alert', including: hyperalert, lethargic, stupor or coma)		
The Diagnosis of Delirium by CAM requires the presence of features 1 and 2 and either 3 or 4		
Delirium Detected?		Yes or No (please circle)

Finding the cause

If delirium is diagnosed, you should look for a cause- this is important for being able to reverse it. Common causes are:

- ▶ Blood abnormalities: high calcium, low sodium, kidney or liver failure.
- ▶ Drugs: morphine and oxycodone can cause delirium, so can steroids and benzodiazepines (midazolam and lorazepam)
- ▶ Withdrawal: from alcohol, nicotine or other recreational drugs
- ▶ Brain metastases

Not all causes are reversible, like a general deterioration in the patient's condition, but we need to think to look for reversible things.

We should only be looking for things to reverse if the patient is well enough to have treatment for it.

Managing delirium- non drug options

Patients with delirium respond well to things that are familiar and help to re-orientate them, such as:

- ▶ Family members being present
- ▶ A clock or calendar in the room
- ▶ Calm attempts to re-orientate the patient
- ▶ Providing mobility, hearing and visual aids
- ▶ Reassurance
- ▶ Help patients to recognise night and day so they can regain their sleeping pattern

Managing delirium- drug options

Antipsychotics such as haloperidol or olanzapine should be used first to treat delirium.

Benzodiazepines such as midazolam and lorazepam, which we use for agitated patients, should not be used on their own in patients with delirium- they may make things worse.

Midazolam or lorazepam can however be given WITH haloperidol or olanzapine if the patient is agitated as well as having delirium.

Medication management

The following two slides are going to demonstrate the differences in medication choice between delirium and agitation, as well as highlighting new starting doses.

DELIRIUM					
	ORAL	SC	CSF / 24 HRS	IM / 24 HRS	
HALOPERIDOL	0.5 - 1.5mg PRN 2 hourly	0.5 - 1.5mg PRN 2 hourly or 1.5-3mg if severe	0.5 - 1mg	0.5mg SC or IM	
OLANZAPINE	2.5 mg PRN 2 hourly	2.5mg PRN 2 hourly	2.5 - 10mg	5mg	
LEVITRAZAM	0.5-2mg PRN 4 hourly	0.5-2mg PRN 4 hourly	0.5mg	0.5mg	
MIDAZOLAM	-	2.5-10mg SC PRN	10-60mg	5mg	
LEVOPROMETHAZINE	-	0.5-2.0mg SC PRN 5mg if agitated to severe	50-200mg	20mg (occasionally 30mg)	
PHENOBARBITAL	-	100mg 200mg IM PRN	600-2400mg	240mg (occasionally 360mg)	

The flowchart for delirium management starts with Step 1: ORAL or SC OLANZAPINE PO or SC PRN or regularly OR VIA CSF AS APPROPRIATE. Step 2: ADD HALOPERIDOL ORALLY OR MIDAZOLAM SC (IF Maximum Dose of Midazolam = 10mg/24hrs/commitment to treated consider adding Phenytoin/Levetiracetam). Step 3: CONTINUE BENZODIAZEPINE STOP HALOPERIDOL OR OLANZAPINE OR LEVOPROMETHAZINE SC PRN or via CSF.

At the bottom, a blue box states: ASSESS FOR REVERSIBLE CAUSES AND TREAT AS APPROPRIATE ENSURE NON-PHARMACOLOGICAL MANAGEMENT MEASURES ARE IN PLACE.

AGITATION					
	ORAL	SC	CSF / 24 HRS	IM / 24 HRS	
HALOPERIDOL	0.5 - 1.5mg PRN 2 hourly	0.5 - 1.5mg PRN 2 hourly or 1.5-3mg PRN 2 hourly if severe	0.5 - 1mg	0.5mg SC or IM	
OLANZAPINE	0.5 mg PRN 2 hourly	0.5 mg PRN 2 hourly	2.5 - 10mg	5mg	
MIDAZOLAM	-	2.5-10mg SC PRN	10-60mg	5mg	
LEVOPROMETHAZINE	-	0.5-2.0mg SC PRN 5mg if agitated to severe	50-200mg	20mg (occasionally 30mg)	
PHENOBARBITAL	-	100mg 200mg IM PRN	600-2400mg	240mg (occasionally 360mg)	

The flowchart for agitation management starts with Step 1: ORAL or SC OLANZAPINE OR SC MIDAZOLAM PRN or Regularly. Step 2: ADD MIDAZOLAM via CSF OR LEVOPROMETHAZINE via CSF (DO ASSESS FOR DELIRIUM). Step 3: ADD PHENOBARBITAL via CSF (leparalid).

At the bottom, a blue box states: ASSESS FOR REVERSIBLE CAUSES AND TREAT AS APPROPRIATE ENSURE NON-PHARMACOLOGICAL MANAGEMENT MEASURES ARE IN PLACE.

Information management

Delirium is scary for patients and their friends/families. It is important to talk to them and document your discussions.

Things you should say:

- “Delirium is quite common in patients who are unwell”
- “It does sometimes get better, and we have some medications to help with that”
- “It also helps if family members are around to be familiar face”

Things you should not say:

- “It will definitely get better”
- “This is a sign of them deteriorating”
- “We will sedate them”

Talking to patients/ families

Be sure to answer any questions patients or families have, but if you are unable to, find someone who can at the next available opportunity.

Information leaflets are soon going to be available to help explain delirium to patients and those important to them.

Quiz

Please view the upcoming quiz on slideshow mode.

The questions are multiple choice- have a go at answering them.

For each question, read it and write down your answer (there may be more than 1 right answer per question) and then click the mouse- the wrong answers will fade away leaving only the correct answers.

Question 1

Which of the following features would make you suspect that a patient was suffering from delirium?

- A. Hallucinations
- B. Low mood
- C. Sleeping a lot
- D. Aggressive behaviour
- E. New confusion

See slide 8 for a recap if needed

Question 2

What is the name of the tool we use to confirm a patient has delirium once it is suspected?

- A. Mini-mental state examination (MMSE)
- B. Confusion assessment method (CAM)
- C. Abbreviated Mental Test (AMT)
- D. The 4AT rapid assessment test for delirium

See slide 10 for a recap if needed

Question 3

If you have reached a diagnosis of delirium, what should your next step be?

- A. Inform the patient/ family
- B. Use haloperidol
- C. Use non-drug measures e.g. re-orientate the patient
- D. Look for reversible causes, if the patient is well enough

See slide 11 for a recap if needed

NB: Informing patients/family comes a close second

Question 4

Which of these measures is NOT one of the recommended non-drug measures to manage delirium:

- A. Invite family to be present as familiar faces help
- B. Calmly reassure the patient
- C. Use clocks and calendars to re-orientate the patient
- D. Tell the family they must stay with the patient at all times
- E. Make sure the patients room is dark at night, and light during the day

See slide 12 for recap if needed

Question 5

Which drug should be used first to treat delirium?

- A. Midazolam
- B. Lorazepam
- C. Haloperidol
- D. Phenobarbital
- E. Quetiapine

See slide 13 for a recap if needed

Question 6

What should you tell patients and those important to them about delirium?

- A. It will definitely get better
- B. It sometimes gets better
- C. It is common in people when they are unwell
- D. It is a sign that the patient is deteriorating
- E. There are some medications available which may help
- F. We will need to sedate the patient

See slide 14 for a recap if needed.

Examples in Practice

Example 1

- ▶ Patient with cholangiocarcinoma, liver and lung metastases was admitted due to general deterioration.
- ▶ On admission patient was drowsy, disorientated, and unable to follow instruction; hallucinating, weak, nauseous and fatigued.

Reversible causes:

- ▶ Possibilities of infection, hypercalcaemia, brain disease and terminal delirium were considered.

- ▶ Bloods were taken: hypercalcaemia, acute kidney injury and infection all confirmed

Treatment:

- ▶ Patient was managed calmly in a side room. Family present to help re-orientate her.
- ▶ Patient was commenced on haloperidol 1.5mg BD

Communication:

- ▶ Patient and family were informed of possible reversibility and consented to treatment with bisphosphonates, IV fluid and antibiotics to reverse underlying causes and haloperidol 1.5mg BD for symptoms of delirium.

Outcome:

- ▶ Patient improved on a daily basis, became more orientated, less confused, hallucinations reducing, independence regained.
- ▶ Haloperidol reduced to 1.5mg OD.
- ▶ Once patient had fully recovered, Haloperidol stopped, patient discharged home.

Example 2

- ▶ Patient with multiple myeloma and bone metastases and history of dementia was admitted with general deterioration. Previous dementia review two weeks prior showed patient's dementia was stable.
- ▶ On admission patient was sleepy, confused, low in mood, easily upset, wandering around building. Patient's family identified an increase in confusion over the previous week.

Reversible causes:

- ▶ Possibilities of infection, opioid toxicity, hypercalcaemia, renal failure and terminal delirium were considered.
- ▶ An MSU was taken and patient commenced on oral antibiotics. Blood results showed a reduced renal function but patient refused IV fluids.

Treatment:

- ▶ Staff worked hard to re-orientate the patient by discussing events from his past. His family struggled to be present to help re-orientate him. Haloperidol 1.5mg OD was prescribed to treat symptoms of delirium and was later converted into a syringe driver for ongoing comfort control.

Communication:

- ▶ Patient's family were informed of diagnosis of delirium and possible reversibility. Measures to try to reverse it were discussed (i.e. use of haloperidol in syringe driver) and agreed to. Possibility of further deterioration was also discussed.

Outcome:

- ▶ Patient's general condition deteriorated, and patient developed terminal agitation as well. Midazolam added to syringe driver to treat the symptoms of this. Patient had a peaceful death.

Thank you

That brings us to the end of this learning presentation.

If you have any questions about this presentation, please feel free to contact Dan Monney at Daniel.Monney@nhs.net or Susie Schofield at susans@wiltbrookhospice.org.uk