Saving lives, Improving lives

NHS
Salford Care Organisation
Northern Care Alliance NHS Group

Delirium

Dr Emma Vardy

Consultant Geriatrician and Clinical dementia lead

Dementia United

Greater Manchester Health and Social Care Partnership

Outline

- What is delirium?
- Why is it important?
- How common is it?
- How to detect
- What can we do?
- Resources
- Summary and questions?
- Enthuse and inspire

Delirium training

- Stroke
- Cardiology
- Gastroenterology
- ACM, EAU
- ED
- Neurosurgery
- Renal
- Bereavement
- Care homes

What is delirium?

- Acute confusion
- Fluctuating confusion
- Inattention
- Disorganised thinking

Types of delirium

- Hyperactive
- Hypoactive

Why is it important?

- Distressing.....patients, families, and staff
- Increased LOS (average 50 days)
- Higher risk of falls & other harms
- Life-threatening (1 in 5 dead in one month, similar to MI and sepsis, 14.3%)
- More likely to get dementia
- Speeds up decline in dementia
- More likely to go into care
- Common yet under-recognised

How common?

- Delirium affects ***1 in 8 acute hospital inpatients***
- 15% of adult acute general patients
- 30% of acute geriatrics patients
- 10-50% of surgical patients
- 50% of ICU patients (21% paediatric ICU, Silver et al, 2015)
- 50% of patients post hip fracture surgery
- Up to 30% ED patients
- Delirium 40% palliative care units, higher at EOL (Rosie at el, Palliat med, 2013, Agar et al, JAMA, 2017)

Care homes

- 8-9% (Boorsma, Int Journal of Ger Psychiatry, 2012. Dutch)
- 36.8% (Morichi, Dementia Geriatr Cog Disorders, 2018. Italy)

What is your clinical experience of delirium

How does it make you feel?

Enids story

Delirium makes dementia worse

Published in final edited form as:
Arch Intern Med. 2012 September 24; 172(17): 1324–1331. doi:10.1001/archinternmed.2012.3203.

The Long-Term Effect of Delirium on the Cognitive Trajectory of Persons with Dementia

Alden L. Gross, PhD, MHS[1,2], **Richard N. Jones, ScD**[1,2], **Daniel A. Habtemariam, BA**[1], **Tamara G. Fong, MD, PhD**[1,3], **Douglas Tommet, MS**[1], **Lien Quach, MS**[1], **Eva Schmitt, PhD**[1], **Liang Yap, PhD**[4], and **Sharon K. Inouye, MD, MPH**[1,2]

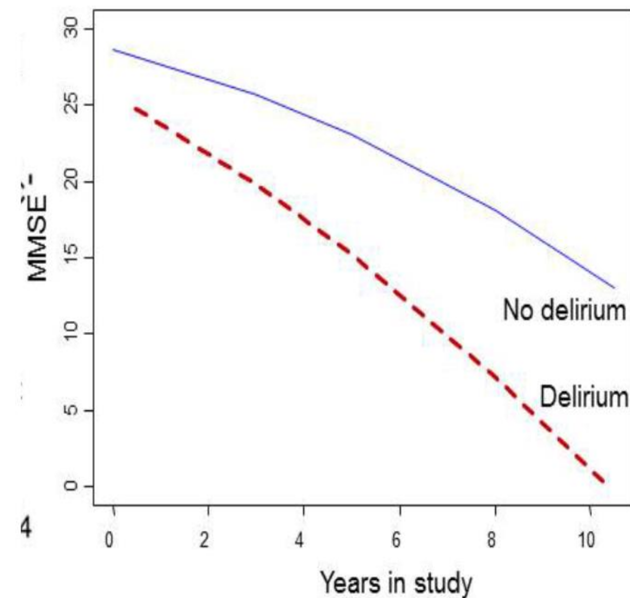
[1]Aging Brain Center, Institute for Aging Research, Hebrew SeniorLife, Boston, MA

[2]Department of Medicine, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA

[3]Department of Neurology, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA

[4]Department of Neurology, Massachusetts General Hospital, Harvard Medical School, Boston, MA

Davis et al, 2012



Why is it important?

- Delirium is poorly detected
- Detection improves care & outcomes
- Delirium is about 30% preventable
- Patients and carers want us to pick this up early…..
- It is distressing

People who have recovered from delirium say:

- **“it’s left an impression on me”**
- **“very frightening”**
- **“I didn’t tell them because I didn’t want them to think I was crazy”**
- **“I didn’t believe a thing they told me”**
- **“I needed to escape”**
- **“a horror”**
- **“a living nightmare”**

Who is at risk?

- Older people
- Dementia
- Frailty
- Sensory impairment
- Multiple medications
- Recent fracture / surgery
- Severe illness
- Sepsis and dehydration

Causes

- Pain
- Infection, Intracerebral
- Nutrition
- Constipation
- Hydration/Dehydration
- Medication, metabolic
- Environment-Sleep, Eyesight, Hearing
- Urinary retention or catheterisation
- Moving places!

PINCH ME

How to detect Delirium?

The 4A Test: screening instrument for cognitive impairment and delirium

CIRCLE

[1] ALERTNESS

This includes patients who may be markedly drowsy (eg. difficult to rouse and/or obviously sleepy during assessment) or agitated/hyperactive. Observe the patient. If asleep, attempt to wake with speech or gentle touch on shoulder. Ask the patient to state their name and address to assist rating.

Normal (fully alert, but not agitated, throughout assessment)	0
Mild sleepiness for <10 seconds after waking, then normal	0
Clearly abnormal	4

[2] AMT4

Age, date of birth, place (name of the hospital or building), current year.

No mistakes	0
1 mistake	1
2 or more mistakes/untestable	2

[3] ATTENTION

Ask the patient: "Please tell me the months of the year in backwards order, starting at December." To assist initial understanding one prompt of "what is the month before December?" is permitted.

Months of the year backwards	Achieves 7 months or more correctly	0
	Starts but scores <7 months / refuses to start	1
	Untestable (cannot start because unwell, drowsy, inattentive)	2

[4] ACUTE CHANGE OR FLUCTUATING COURSE

Evidence of significant change or fluctuation in: alertness, cognition, other mental function (eg. paranoia, hallucinations) arising over the last 2 weeks and still evident in last 24hrs

No	0
Yes	4

4 or above: possible delirium +/- cognitive impairment
1-3: possible cognitive impairment
0: delirium or cognitive impairment unlikely (but delirium still possible if [4] information incomplete)

4AT SCORE [ ]

TAKES 1-2 MINUTES

Specificity=84%

Sensitivity=90%

Single Question in Delirium (SQiD)

Is the person more confused than before (or more sleepy)

If in doubt treat as delirium…..

Diagnosis

- History (informant)
- Vital signs
- Physical examination-infection, constipation, dehydration, inc neuro
- Cognitive assessment tool

Investigations

- Bloods- FBC, UE, LFT, Calcium, Magnesium, CRP, glucose, phosphate
- Urine dip (don’t be a dipstick!)

- Blood cultures, ABG, CXR if indicated
- ECG
- CT head - if focal neurology, new confusion after a head injury or fall, or persisting symptoms. Anti-coagulation- urgent.

Management

- Identify and treat underlying causes- infection, constipation,
- Review medication
- Supportive care-close observation, nutrition, hydration
- Alteration of environment-re-orientation, family
- Verbal and non-verbal de-escalation techniques
- Provide information

Pharmacological treatment

- Only for behavioural symptoms
- Severe agitation
- Harm to self/others
- Where other strategies have failed
- NICE-2010-haloperidol, olanzapine-start low and go slow, short course
- Careful with antipsychotics, especially DLB/PD
- Trust guideline-small dose lorazepam

What can you do?

Delirium is preventable and treatable

Prevention

- Around 1/3 can be prevented
- Education of staff
- Orientation
- Good diet and fluid intake
- Mobility
- Infection prevention, avoid catheterisation
- Regular medication review
- Pain relief
- Glasses/hearing aids
- Promote good sleep patterns
- Lighting levels appropriate to time of day
- Family/friends encouraged to visit

NICE QS delirium-July 2014

- Statement 1. Adults newly admitted to hospital or long-term care who are at risk of delirium are assessed for recent changes in behaviour, including cognition, perception, physical function and social behaviour.
- Statement 2. Adults newly admitted to hospital or long-term care who are at risk of delirium receive a range of tailored interventions to prevent delirium.
- Statement 3. Adults with delirium in hospital or long-term care who are distressed or are a risk to themselves or others are not prescribed antipsychotic medication unless de-escalation techniques are ineffective or inappropriate.
- Statement 4. Adults with delirium in hospital or long-term care, and their family members and carers, are given information that explains the condition and describes other people's experiences of delirium.
- Statement 5. Adults with current or resolved delirium who are discharged from hospital have their diagnosis of delirium communicated to their GP.

Royal College of Nursing

RCN Don’t discount delirium

European delirium association

Stop delirium!

www.yhscn.nhs.uk

Wealth of resources

NHS Lanarkshire care homes protocol

Questions

Emma.vardy@srft.nhs.uk