Improving the quality of care of patients with delirium

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How are we doing now?

We are doing badly.

Difficult issues in delirium: clinical

Delirium affects 1 in 8 hospital patients; outcomes are poor

Many staff do not know about delirium

Detection levels are low (<30%)

Treatment is not evidence-based

Issue of persistent delirium / post-delirium dementia

Public & policy-maker awareness is low

Difficult issues in delirium: research

Lack of neuropsychological research: criteria are unclear

Lack of consensus on rating scales

Pathogenesis not well understood

Treatment studies are challenging

Delirium and dementia relationship unclear

What we do know: scientific evidence

Causes

Risk factors

Consequences

Prevention works (though not widely implemented)

Treatment can improve patient & carer experience

What delirium experts mostly agree on:

Detection is helpful: treatment and communication

Comprehensive, expert treatment <u>does</u> work

Good consensus on how to approach treatment

Antipsychotics are sometimes effective in ⬇agitation

Delirium often leads to severe functional / cognitive decline

Improving care: where do we go from here?

Policy makers

Public

Funders

Improving delirium care: domains of activity

Senior clinical staff

Systems of care

Junior clinical staff

Hospital managers

Education & training at the hospital level

Education

Step 1 is providing basic knowledge: many staff don’t know that delirium exists

Difference between delirium and dementia

Then staff have to know that delirium care matters

Technical education is essential but not enough

Stories from the patient’s perspective are very powerful

Other triggers: quality of care (risk), length of stay (economics, patient flow)

Educational resources

Many slide collections available (google ‘delirium filetype:pptx’)

Websites:

- European Delirium Association
- American Delirium Society
- ICU Vanderbilt
- Vancouver Island
- Scottish Delirium Association

Etc.

E-learning

Videos of patient experience, eg. at European Delirium Association website

DELIRIUM: FACT SHEET FOR HOSPITAL MANAGERS

Why is delirium in acute hospitals important?

- Delirium is an acute decline in mental functioning that affects ***1 in 8 acute hospital inpatients***
- Delirium is linked with 2-3 fold increased length of hospital stay, 2-fold risk of falls, and 3-fold higher mortality.
- Delirium is commonly not detected; detection improves care & outcomes
- Delirium is about 30% preventable

Q. What is Delirium?
A. Acute decline in mental functioning with confusion, over activity or underactivity, distress (hallucinations, paranoia). Usually caused by acute medical illness, surgery, or by medicines or medication withdrawal. Most patients recover, in a few days to a few weeks. Delirium is not the same as dementia, which is chronic and generally irreversible.

Q. Where in the hospital is delirium most common?
A. 15% of adult acute general patients; 30% acute geriatrics patients; 50% ICU patients; 50% post hip fracture surgery.

Q. Why is delirium serious?
A. Distressing for patients and families; 1 in 5 dead in one month; increased risk of falls and other complications; increased risk of new institutionalisation.

Q. What is the treatment for delirium?
A. Early treatment of underlying medical causes, plus treatment of distress and other features of delirium itself. Treatment is often complex and prolonged.

Q. Can delirium be prevented?
A. Studies show that around 30% of delirium can be prevented through reduction of risk factors, careful medical management, etc.

Q. What are the implications for hospital managers?
A. Delirium is a major unmet need in modern acute hospitals. As the population ages, it will become more common. Education, training and audit are effective in improving the care of delirium.

Q. What has been done so far?
A . The Scottish Delirium Association (a group comprising health professionals, local authority, Alzheimer Scotland and carer representatives) has developed a National Delirium Management Pathway, and jointly with Health Improvement Scotland, a new delirium care bundle to help clinicians to improve care.

These specific actions might help:

1. Identify a member of staff (e.g. a doctor or nurse with specialist skills in the care of older people) to take the lead in mandatory delirium training, improved care, and reducing complications.
2. Measure rates of delirium detection.
3. Incorporate delirium care into governance and quality practices.

Resources and links available at www.scottishdeliriumassociation.com

Induction – 1 page of written information

Videos / other material placed on intranet

Lectures

E-learning

Certificates

Etc.

Clinical care of delirium: ward level

Detection

Detection of delirium

"THINK DELIRIUM"

NICE GUIDELINES, 2010

Why does detection matter?

Communication

Pain assessment and treatment

Distress

Mismanagement of behavioural issues, eg. sedatives for ‘wandering’

Confusion between delirium and dementia ➡ wrong management

Care may be difficult: iv lines, eating, drinking, taking oral drugs

High falls risk

Core features

Acute onset/fluctuating course

Inattention

Additional features

Altered alertness (eg. drowsiness)

Other cognitive deficits, eg. in memory

Poor comprehension

Psychotic features

Sleep-wake cycle disturbance

Initial approach

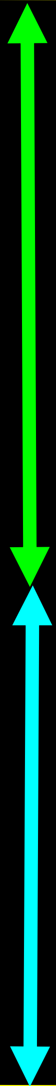
[1] Assess alertness

[2] Test cognition

[3] Acute onset and/or fluctuating course?

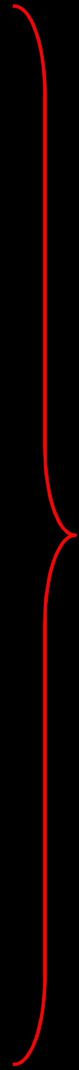
‘Testability’ with cognitive tests or interviews

Normal function



Range of abnormalities of cognition: testable

Not cognitively testable (drowsy, highly agitated)



Coma

New screening test: '4AT'

Alertness

AMT4

Attention

Acute change or fluctuating course

Validation of the 4AT, a new instrument for rapid delirium screening: a study in 234 hospitalised older people

Bellelli et al., Age Ageing, in press

N=234 consecutive older patients

Acute geriatrics and rehabilitation settings

4AT compared against reference standard (independently)

Sensitivity and Specificity

	Score	Sensitivity	Specificity
Full Score	4 or above	89.7%	84.1%
Alertness	4	53.2%	96.1%
AMT4	1 2	96.6% 89.7%	54.6% 80.2%
Attention	1 2	93.1% 86.2%	49.8% 82.6%
Acute change/Fluctuation	4	69.0 %	94.2%

Information and free download:

www.the4AT.com

Management

Initial assessment

If delirium suspected, treat as a medical emergency

(1 in 5 are dead in one month)

Nursing / medical input early

ABC

Pulse / BP / RR / saturations / temp / BM / check drugs

Delirium: "Treat the cause" ?

Single cause of delirium found in < 50% of cases

No acute cause found in 25% of cases

Multiple possible pathways to delirium

➔ TREAT THE CAUSES

Treatment for all cases of delirium: 2 steps

1. Treat clear precipitating causes

AND

2. Optimise brain function

Common medical precipitants of delirium

Infections, eg.

- **UTI**
- **Pneumonia**
- **Cholecystitis**
- **Gastroenteritis**

Metabolic

- **Hyponatraemia**

Acute kidney injury

Heart failure

Constipation

Stroke

Drugs (esp AKI + opioids)

Optimising the brain: medical & nursing care

Oxygen

Blood pressure

Glucose

Hydration

Nutrition

Metabolic factors (hyponatraemia, acidosis)

Avoid urinary catheter

Treat constipation

Minimise deliriogenic drugs

Minimise psychological stress

Pain control

Address visual, hearing impairments if possible

Mobilise

Agitation

Non-pharmacological

- look for acute cause (pain, thirst, hunger, urinary retention)
- repeated orientation
- reassurance
- avoidance of confrontation
- avoidance of physical contact (can be perceived as assault)
- may need additional staffing

Pharmacological (only if necessary)

- haloperidol 0.5mg 20-30 min intervals
- risperidone 0.25mg nocte
- consider lorazepam 1mg, but SECOND LINE (PD, DLB, BDZ/EtOH w/d)

Distress

Severe distress is common but underdetected in acute hospitals

Often in context of psychosis: eg. delusions

PTSD may follow delirium

Role for antipsychotics in distressing psychosis in delirium

Common practice in palliative care

Other aspects of delirium care

Immobility

Skin care

Falls

Nutrition

Dehydration

Difficult rehabilitation

Drug administration

Aspiration pneumonia

Family distress

Follow-up

Follow-up of delirium

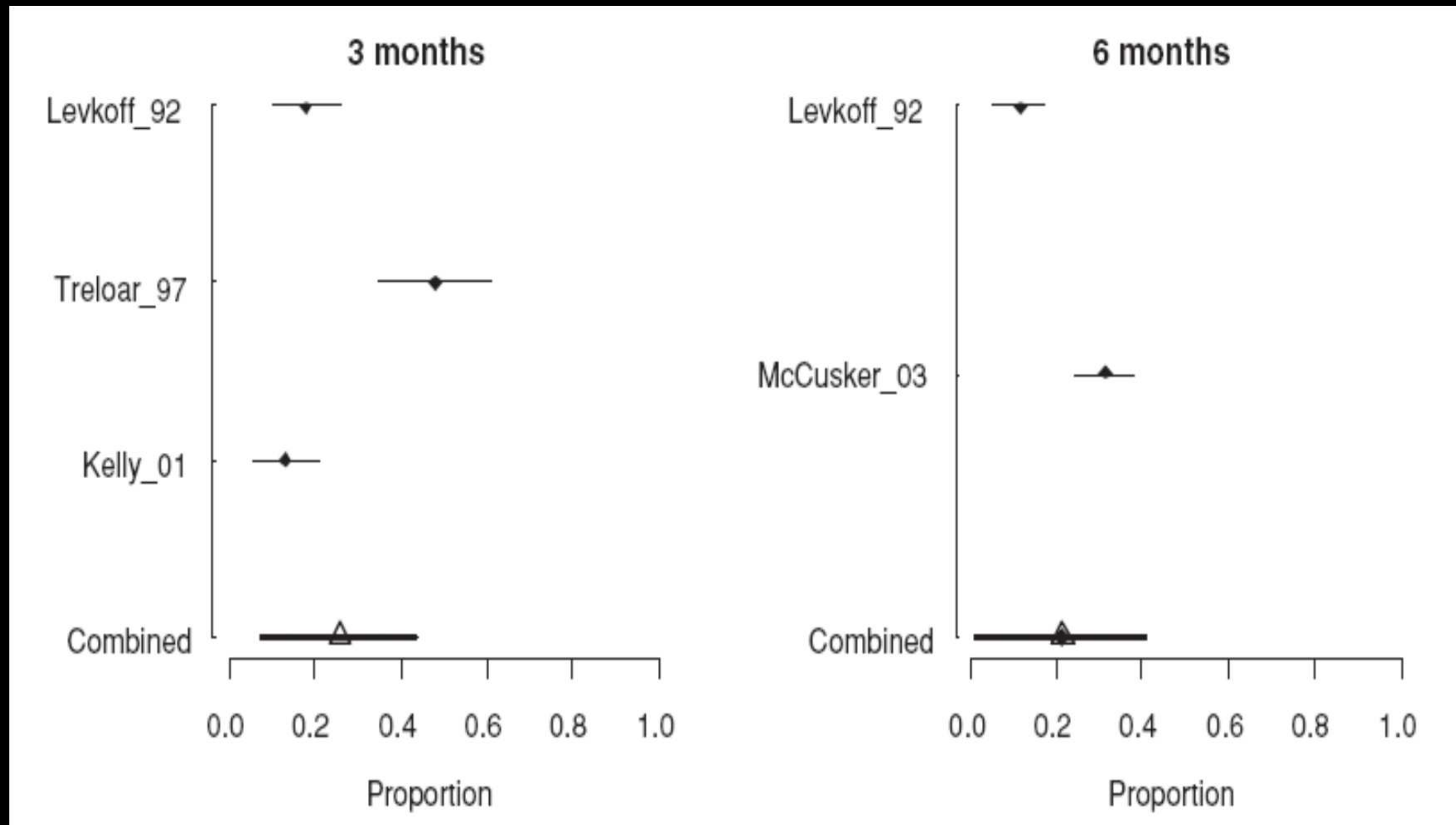
Delirium is a marker for current and future dementia

If current dementia excluded, high risk patients should be monitored (GP/OP clinic)

Formal documentation of diagnosis in discharge letter is crucial

Counselling may be required: check for psychological trauma

Persistent delirium

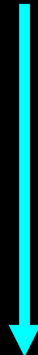


Cole et al., Age and Ageing 2009

Dementia diagnosis in acute hospitals

Good practice

Diagnosis/provisional diagnosis



enhanced package of care
GP aware
psychiatry assessment
access to CPN
access to drug Rx
forward planning
readmission
family stress

Poor practice

No diagnosis

standard package of care
⬆risk of readmission
⬆family stress

Prevention

Proactive geriatrics consultation: hip#

10 modules

- CNS oxygen delivery (O_2, Hb)
- fluid/electrolyte
- pain management
- ⬇psychoactive meds
- bowel/bladder (catheter out by 2 days)
- nutrition
- mobilisation
- postop complications
- environment
- management of delirium

Marcantonio, JAGS 2001

Proactive geriatrics consultation: results

Outcome	Geri Consult (N=62)	Usual Care (N=64)	P value
Delirium	32%	50%	.04
Severe delirium	12%	29%	.02

Marcantonio, JAGS 2001

Systems of care

Systems of care

Whole system approach

Seeing delirium and dementia as ‘core business’

Needs leadership at the institutional levels

Honesty about the size of the challenge

Standard assessments to detect and to enable tailoring of care

Audit and measurement

External inspections (government)

Public, Policymakers, Funders

12.11.11

MAGAZINE

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By David Aaronovitch

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Dementia patients 'miss key tests'

Many dementia patients fail to have the proper checks when they are in hospital, an audit of care has found.

The National Audit of Dementia found some improvements since its first analysis of care in England and Wales in 2011.

Communication failure

Many people with the condition become very confused when they are admitted to hospital.

But the audit found only half had their mental state assessed, and even fewer were checked for delirium - a state of mental confusion - rates it said were "alarmingly low".

The authors said: "Delirium is associated with greater risks of longer admission, hospital acquired infections, admission to long term care, and death.

Conclusions

Delirium care is mostly not done well – a global problem

Causes, characteristics and consequences are well-studied

Prevention works, but not routinely implemented

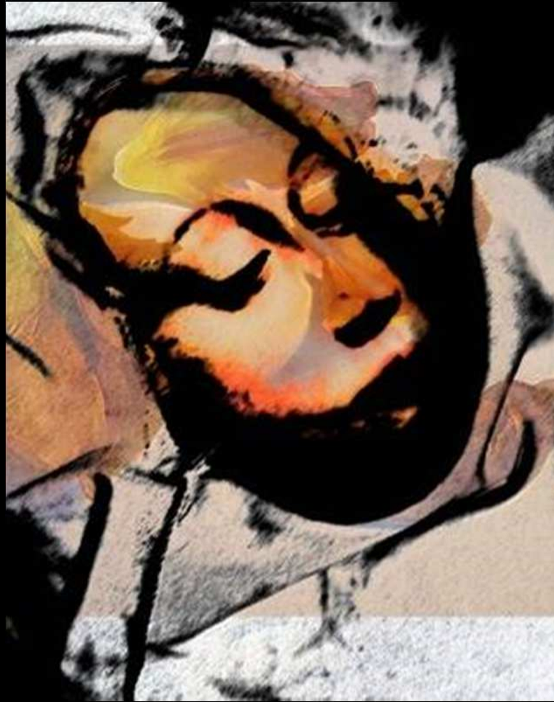
Many major unresolved challenges

Action at all levels is required

Some actions are much easier than others, eg. raising awareness

All healthcare practitioners can take steps

Many solutions need institutional leadership/commitment



www.europeandeliriumassociation.com

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