**LEEDS TEACHING HOSPITALS TRUST**

| **TITLE Clinical Guideline for the Diagnosis and Management of Delirium in adults.** |
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| **Guideline Detail**<br>Publication date: (to be completed by LHP staff)<br>Next Review date:<br>Status: |
| Contents |
|  |
| **Summary of Guideline** |

# LTHT Pathway for the Diagnosis, Investigation and Management of Delirium

## Think Delirium

Has **your patient** got any risk factors for delirium?

• 65 years or older • Cognitive impairment and/or dementia • Current hip fracture • Severe illness

**OR**

Has **anyone*** reported a recent change in:

**Cognitive function**: worsened concentration, slow responses, confusion.
**Perception**: visual or auditory hallucinations
**Physical function**: reduced mobility/ movement, restlessness, agitation, changes in appetite, sleep disturbance.
**Social behaviour**: lack of cooperation with reasonable requests, withdrawal*, or alterations in communication, mood and/or attitude.

Yes

No

Re-assess 'Think Delirium' daily

## Diagnose

- Refer to DSM-IV criteria; Is this Delirium?
- Perform or repeat AMTS measurement
- Consider using short -CAM or 4AT tools to assist recognition
- If unsure seek support

No Delirium

Delirium

## Investigate

- Full clinical history & collateral history; looking for contributory factors
- Full 'top to toe' examination

**1st Line investigations**

- FBC,U&E,LFT,CRP,Ca,Mg,PO4
- Vit B12,Folate,TFT (within last 3/12)
- Capillary blood glucose
- If clinically indicated:
  - Arterial blood gas
  - Cultures; blood, urine, stool, sputum
  - CXR, AXR, CT head

**2nd line** investigations

- Consultant/specialist led

## Manage

**Medical management**

- Treat the underlying cause
- Minimise other precipitants
- Ensure good: nutrition & hydration, pain relief, oxygenation
- Avoid: Polypharmacy & specific drugs
- Avoid: constipation, immobility, restraint, bladder catheter
- Non-resolving/no cause; consider 2nd line Inx, alternative diagnosis and hospital mental health team review (HMTH)

**Environment**

- Regular team of HC professionals, avoid ward moves
- Consider: noise, lighting, clock, activities, family involvement
- Safety: falls prevention, pressure care

**Communication**

- With the patient:
  - Ensure hearing aids are switched on and working
  - Offer explanations, reorientation and reassurance
- With family:
  - Explain diagnosis, provide LTHT information leaflet

**Behavioural symptoms**

- See LTHT guidance Management of acute behaviour disturbance in adult patients
- Verbal/non verbal techniques, one to one care, involve relatives
- If risk of harm to self or others consider pharmacological management
- Consider DOLS

**Hospital Mental Health Team…when to refer**

1. Any significant behavioural disturbance requiring medication, particularly if posing a risk to themselves or others
2. **You must refer** if the patient has required 2 or more administrations of parenteral medication.
3. Diagnostic uncertainty e.g. depression vs delirium vs dementia

## Reassess

- Serial AMTS
- Team observation
- Night assessment
- Collateral history

**Has delirium resolved?**

No

Yes

## Follow up options

- Consultant clinic
- CMHT (only on advice of HMHT)
- Memory clinic (ask GP to refer)
- GP reassessment

## Aims

To improve the diagnosis, investigation and management of Delirium in hospitalised adults; with the overall aim of improving patient care.

## Objectives

To provide evidence-based recommendations to aid diagnosis, investigation and management of delirium in hospitalised adults in Leeds Teaching Hospitals NHS Trust (LTHT). It does not apply to delirium caused by alcohol or drug intoxication or withdrawal (in whom separate guidance is available). Nor does it apply to those receiving end of life care or those in critical care units.

## Background

Delirium (or acute confusional state) is a common and serious clinical syndrome characterised by disturbed consciousness, cognitive function or perception, which is acute in onset and has a fluctuating course.

It can be subdivided into two major subtypes; hyperactive and hypoactive delirium. It is important to note that hypoactive delirium is the commonest type, is less well recognised and has a poorer prognosis. Their characteristics are described below.

Hyperactive delirium: increased motor activity, agitation, hallucinations, inappropriate behaviour.

Hypoactive delirium: reduced motor activity and lethargy.

The prevalence of delirium in people on medical wards in hospital is about 20% to 30%. Between 10% and 50% of people having surgery develop delirium. Older people, those with a current hip fracture or a serious illness and those with dementia are at higher risk of developing delirium.

People who develop delirium may:

- need to stay longer in hospital or in critical care
- have an increased incidence of dementia
- have more hospital-acquired complications, such as falls and pressure sores
- be more likely to need to be admitted to long-term care if they are in hospital
- have an increased mortality rate

## Recognition and Diagnosis

**Think 'Delirium'**

- **Identify patients at risk** of Delirium
  i. 65 years or older
  ii. Cognitive impairment and/or dementia
  iii. Current hip fracture
  iv. Severe illness

- **Carry out a cognitive assessment** in all patients admitted to LTHT who are over the age of 75, have a diagnosis of dementia and all those with one or more risk factors for delirium. Use

the Abbreviated Mental Test Score (see box 1). This should be recorded clearly in the LTHT admission booklet and on the Dementia CQUIN form.

**Box 1**

**AMTS**
Age
Date of birth
Time (to the nearest hour)
Place
Recognise 2 people
Year
Who is the current monarch?
When did WW2 end?
Count backwards from 20-1
Recall - remember '42 west street'
**Score /10**

- **Assess for a recent (hours or days) change or fluctuation in behaviours**. A collateral history from family or carers is essential to determine this and should be clearly documented in the LTHT admission booklet.

**Ask about**

i. Change in cognitive function: worsened concentration, slow responses, confusion. Serial measurements of AMTS may help to detect changes.
ii. Change in perception: visual or auditory hallucinations
iii. Change in physical function: reduced mobility/ movement, restlessness, agitation, changes in appetite, sleep disturbance.
iv. Change in social behaviour: lack of cooperation with reasonable requests, withdrawal, alterations in communication, mood and/or attitude.

- Specific validated tools may be used to help identify delirium. Tools we recommend using are the short-CAM and the 4AT, links to both these tools are below. There will be variation between departments as to which tool is being used so please check in your own department.
  i. *www.hospitalelderlifeprogram.org/delirium-instruments/**short-cam**/*
  ii. *www.the**4at**.com/*

**Confirm Diagnosis**

- A clinical assessment should be carried out based on the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (see box 1 below) criteria by a healthcare professional who is competent to do so.
- The diagnosis of delirium should be documented in the patient's medical notes and communicated to nursing staff, the patient and their relative/next of kin.
- Provide the joint LTHT and LYPT Delirium patient information leaflet to the patient and their carer available here

**Box 1: DSM-IV criteria**

(a) disturbance of consciousness (i.e., reduced clarity of awareness of the environment) with reduced ability to focus, sustain, or shift attention.

(b) a change in cognition (such as memory deficit, disorientation, language disturbance) or the development of a perceptual disturbance that is not better accounted for by a pre-existing, established, or evolving dementia.

(c) the disturbance develops over a short period of time (usually hours to days) and tends to fluctuate during the course of the day.

(d) there is evidence from the history, physical examination, and laboratory findings that:

(i) the disturbance is caused by the direct physiological consequences of a general medical condition,

(ii) the symptoms in criterion (i) developed during substance intoxication, or during or shortly after, a withdrawal syndrome, or

(iii) the delirium has more than one aetiology".

Differential Diagnosis

The differential diagnosis of delirium includes:

- Dementia
- Depression
- Non-convulsive epilepsy
- Psychotic illness

Second opinions

- It can be difficult to distinguish between these diagnoses. Where there is diagnostic uncertainty a specialist opinion should be sought from the Liaison Psychiatry team (see below for contact details ) or where a neurological condition is suspected a referral should be made to the neurology registrar, available via switchboard.

**NB:** If delirium is NOT diagnosed at this point 'Think delirium' on a daily basis, monitoring and reassessing the patient for the presence of delirium.

## Investigate

The aim of clinical assessment is to identify precipitants of delirium both in those with delirium and in those at risk.

**Clinical History**

- A history from the patient and collateral history from family/carers should aim to get a clear sense of recent events. In addition past medical history and a full systematic enquiry should be sought to detect underlying causes.

- It is important to remember that in patient with existing Dementia and those that are very frail, delirium may be precipitated by only a small change e.g. constipation.

- Seek evidence of contributory factors

  - Infection – low threshold for ruling this out in older people (see 1st line tests)
  - Cardiovascular - myocardial infarction, heart failure, arrhythmia
  - Respiratory - hypoxia, e.g. pulmonary embolus, hypercapnia
  - Gastrointestinal -constipation/impaction/faecal incontinence
  - Urological - infection, urinary retention, incontinence
  - Neurological - changes in physical, cognitive and perceptual function as above. Onset, course of change and previous episodes. Evidence of seizure activity.
  - Endocrine/metabolic disturbance
  - Nutritional and hydration status
  - Sensory deficits – hearing, vision impairment
  - Mobility – falls, head injury
  - Alcohol and illicit substances
  - Sleep hygiene

- Mental health history is essential to differentiate delirium from other differential diagnoses.
  - mood, evidence of depression, recent significant life events

- A full drug history and review of the hospital drug chart is essential with particular attention to:
  - Polypharmacy
  - Specific drug groups: anticholinergics, opiates, analgesics, steroids, anti-parkinsonian drugs, tricyclic antidepressants
  - Intentional or unintentional changes to medication including adherence problems, overdose and abrupt cessation of drugs known to be associated with withdrawal effects.
  - decreases in renal function leading the accumulation of renally excreted drugs
  - Complimentary/alternative therapies
  - Over the counter medications

- Social History
  - Changes in functional status e.g. reduced mobility, inability to complete tasks
  - Pre-admission living circumstances and care arrangements
  - Intellectual function: ability to manage household affairs etc.
  - Driving

**Examination**

A ‘top to toe’ physical examination should be carried out. Particular attention should be paid to:

- Observations including NEWS score
- Conscious level
- Hydration status
- Nutritional status
- Evidence for and site of potential infection
  - Skin and joints should be examined including pressure areas, dressings should be removed for this purpose
- Evidence of drug or alcohol withdrawal
- Evidence of abnormal metabolic status e.g. tremor, tachycardia, bradycardia

- Abdominal examination + bladder scan to rule out urinary retention
- Neurological examination, including speech and gait
- Rectal examination if history suggestive of faecal impaction

## Investigations

There is limited literature to evidence which investigations should be carried out for delirium. The aim is to find or exclude treatable causes.

**1st Line**

- **Basic blood tests**:
  - FBC, U&E, CRP, LFT, Ca, Mg, PO4,
  - TFT's (if not checked within the last 3 months of if medication compliance concerns)
  - Vitamin B12, Folate (if anaemia, raised MCV, concerns re alcohol or nutritional intake)
  - Capillary blood glucose
  - Consider arterial blood gas and lactate (if low SpO2, raised respiratory rate or sepsis)

- **Cultures** are indicated where infection is suspected, e.g. symptoms on systematic enquiry, fever, raised WCC/neutrophilia, raised CRP. There should be a low threshold for suspecting infection particularly in older patients who may not have a systemic inflammatory response or specific symptoms. Remember that older people may have a normal or low temperature when septic.
  - MSU
  - Blood cultures
  - Stool cultures
  - Sputum cultures

- **Specific drug levels** should be considered in patients on drugs with a narrow therapeutic index for example digoxin and lithium.

- ECG

- Imaging:
  - CXR
  - AXR - if clinical suspicion of perforation or obstruction.
  - CT head – if focal neurological signs, recent fall or head injury, or evidence of raised intracranial pressure. Index of suspicion should be higher in patients on anticoagulants such as warfarin.

**2nd line tests should be Consultant/Specialist led**

An opinion should be sought from a Specialist with experience in managing delirium e.g Consultant in Elderly Medicine, Liaison Consultant Psychiatrist for older people, Consultant neurologist (where it is felt likely that there is an underlying neurological condition).

**2nd Line**

- Specific imaging
  - MRI head + T1/2

- Other specific tests
  - EEG

- Toxicology
- Serum cortisol
- LP - CSF for protein, glucose, lymphocytes, microscopy, culture and sensitivities
- 

- Neurology or Psychiatry may recommend specific antibodies to look for unusual causes of delirium. The following is a list of these for reference in case you are asked to request them:
  - Anti-Hu, Anti Ma2, Anti-VGKC, Anti-CRMP5/Cv2, Anti-Ri, Anti-NMDA-R, Anti Yo, Anti-Tr.

## Treatment / Management

The management of Delirium is multidisciplinary and through multiple approaches as described below. Many aspects of management can apply equally to those identified as 'at risk' of developing Delirium with the aim of minimising the likelihood of Delirium developing while in hospital.

### Medical Management

1. Find and treat the underlying cause/causes.

2. Minimise or avoid other precipitants that may contribute

| | |
|---|---|
| **Dehydration:** | **Ensure drinks are offered regularly, a target of 60ml with each patient interaction is useful. Monitor fluid balance and consider SC/IV fluids if necessary.** |
| Mouth care: | Increased risk of poor mouth hygiene and parotitis, therefore use enhanced mouth care regimes when intake is poor. |
| Constipation: | Monitor bowels and prescribe laxatives. Review whether the patient is managing to take these. PR exam and enema where needed. |
| Nutrition: | Ensure dentures are in place and fitting. Ensure MUST screening tool completed. Use red trays and food charts. Ask family to help with meal times. |
| Pain: | Assess for pain. Look for non-verbal and physiological signs of pain<br>Prescribe simple analgesia e.g Paracetamol.<br>Review existing pain medication, which may be responsible e.g. Opiates, Tramadol. |
| Oxygenation: | Ensure adequate oxygenation in line with LTHT oxygen prescribing guidelines (link). |
| Medications: | Carry out a full medication review, considering the number and type of medications.<br>Avoid anticholinergics, opiates.<br>Seek advice from your ward or specialist pharmacist |

| | |
|---|---|
| | to review medications. |
| Sensory impairment: | Ensure hearing aids are working and switched on. If problems, replace battery and consider audiology referral.<br>Resolve any reversible issues e.g. ear wax<br>Ensure patients spectacles are available to them and clean. |
| Mobility | Encourage walking where possible and ensure exercises available for those with limited mobility.<br>Mobilise as early as appropriate post-surgical procedures.<br>Ensure walking aids are easily accessible. |
| Sleep disturbance: | Try to minimise medical and nursing interventions at night.<br>Review timing of medications. |
| Continence: | Avoid urinary catheterisation unless clear evidence of significant urinary retention.<br>Encourage regular toileting. |
| Physical restraint | Should be avoided |

**Environment**

It is essential to consider the environment in which the patient is being cared for. In a busy ward it can seem impossible to create calm, but a few simple things can be attempted.

- Ensure appropriate lighting levels for the time of day
- Ensure the clock is working and set to the correct time
- Use calendars to aid reorientation
- Eliminate unexpected or irritating noises (e.g pumps alarming)
- Try to provide continuity of care in medical and nursing staff
- Avoid ward moves
- Encourage mobility and try to engage in activities with other people
- Encourage family to visit and bring familiar objects or pictures

**Consider safety**

Patients with delirium are at a higher risk of:

- Falls: Ensure the multi-disciplinary team is aware of the elevated falls risk, the falls care plan has been completed and appropriate interventions to reduce the falls risk have been implemented e.g. review of footwear, falls sensor provided if appropriate one to one observation considered

- Pressure sores: Patients should have a formal pressure sore risk assessment using the 'Purpose T' risk assessment tool and receive regular pressure area care, including special mattresses where necessary.

- Over-sedation: review medications carefully, ensure careful review of BNF guidance or discussion with pharmacy if withdrawal is needed.

- Functional Impairment: Patients should be mobilised as soon as their illness allows. Assessment by a physiotherapist and occupational therapist to maintain and improve functional ability should be considered in all delirious patients.

- Continence problems: A full continence assessment should be carried out. Regular toileting and prompt treatment of urinary tract infections may prevent urinary incontinence. Catheters should be avoided where possible because of the increased risks of trauma in confused patients and the risk of catheter associated infection.

- Malnutrition: It is often difficult for patients to eat enough to meet increased metabolic needs. Foods that take into account the patient's preferences, and the option of finger foods should be considered as should support and encouragement at mealtimes. Family members or carers can provide valuable assistance at mealtimes and should be asked if they are available to provide this.

- Dehydration: Is very common and often overlooked. Use a fluid balance chart to monitor intake. A team effort is needed to encourage patients to drink regularly. For patients with hypoactive delirium, intravenous fluids may be needed to ensure adequate hydration.

**Communication**

- The diagnosis should be explained to the patient and their next of kin and the joint LTHT and LYPFT Delirium information leaflet provided
- Delirium can be a frightening experience; offer reassurances
- Re-orientate the patient several times a day
- Ensure hearing aids are switched on and working
- Involve patients in their care taking into account their wishes and preferences.
- If patients do not have the Mental Capacity to make a specific decision, healthcare professionals should follow the Department of Health's advice on consent and the code of practice that accompanies the Mental Capacity Act

**Behavioural symptoms**

People with delirium may become distressed or pose a risk to themselves or others. In this situation:

- First use verbal and non-verbal techniques to de-escalate the situation
- Look for and remedy the cause for the agitation e.g. pain, thirst, need for toileting
- Always use the **least restrictive option** when keeping patients safe
- Assess and document whether the patient has the Mental Capacity to make decisions regarding their current medical treatment
- Consider using DOLS if the patient is at risk of being deprived of their liberty e.g. are they being very closely supervised? Would you stop them from leaving the ward if they attempted this? Please review LTHT Deprivation of Liberty Safeguards standard operating procedure if you are not familiar with the

use of DOLS.

**Sedation** should be avoided if at all possible, it may worsen confusion and Increase falls. However it may be needed in the following situations:

- In order to carry out essential investigations
- To prevent harm to the patient or others
- To relieve distress in highly agitated patients

**The Golden Rules are:**

- Use only one drug if at all possible
- Start with the lowest possible dose
- Give orally wherever possible
- Allow sufficient time for drug to act (see below)
- Don't escalate doses, instead, **repeat the same dose**
- Don't exceed maximum doses as stated in the BNF
- Review every 24 hours
- Discontinue as soon as possible
- **If 2 or more doses are administered intramuscularly you must contact the Liaison Psychiatry team for advice.**

**For choice of medication, starting doses and maximum doses in Adults Use LTHT guidance Acute behaviour disturbance in adult patients.**

**In older adults and or those who are frail** the risks of sedative medication are higher and **we therefore recommend the following**:

Currently for older people in LTHT we recommend:
- Lorazepam 0.5mg -1mg orally (can be given intramuscularly when absolutely necessary)Given every 2-4 hours; peak effect at 2 hours
- Intramuscular dosing: 0.25mg-1mg every 2-4 hours; peak effect after 60-90 minutes
  (NICE guidelines recommend using haloperidol first line; however in an older adult who is delirious and distressed, we are unlikely to know if they have a Lewy Body dementia or even a degree of Parkinson's. Therefore, lorazepam offers the safest option in this situation.)

If there is a significant risk of respiratory depression or the patient is already taking Benzodiazepines:
- Haloperidol 0.5mg orally (or intramuscularly when absolutely necessary) Additional doses can be given 4 hourly when required; peak effect after 4-6 hours
- Intramuscular dosing: 0.5m-1mg, observe for 30-60 minutes and repeat if necessary; peak effect after 20-40 minutes

**DO NOT USE** Haloperidol in patients with Parkinson's disease or Lewy Body dementia and avoid in patients taking medicines that prolong the QT interval or who have bradycardia

**Do not exceed these maximum doses in older or frail adults :**
Lorazepam: maximum 2mg / 24 hours
Haloperidol: 5mg/24 hours.

**Other important information about the drugs used**:
- When given intramuscularly lorazepam must be diluted 1:1 with sodium chloride 0.9% or Water for

Injection BP immediately before administration.

- There are specific risks with different classes of medication. Risks may be compounded if used in combination.
- **Benzodiazepines**: can cause loss of consciousness; respiratory depression or arrest; and can cause cardiovascular collapse in patients also receiving clozapine. Monitor arterial oxygen saturation and have oxygen ready in case required.
- **Antipsychotics** : can cause loss of consciousness, cardiovascular/respiratory complications and collapse; seizures; akathisia; dystonia including oculogyric crisis; dyskinesia; neuroleptic malignant syndrome and excessive sedation.

When using haloperidol:

- Procyclidine should be immediately available to reduce risk of dystonia or other extrapyramidal side-effects.
- If dystonia occurs then give procyclidine i/m or i/v as per manufacturer's instruction.

**Liaison Psychiatry**

The Liaison Psychiatry team can provide advice and assessment of patients. They should be contacted in the following circumstances:

- Patients who have significant behavioural symptoms requiring medication or posing a risk to themselves or others.
- **You must refer patients** if they have required 2 or more administrations of parenteral sedative medications.
- When the diagnosis is unclear
- To provide a second opinion for difficult Mental Capacity decisions
- Delirium which is slow to resolve

**Contact details:**

| **Working age adults** | **Age 65 years and over** |
|---|---|
| Liaison Psychiatry for Working age adults<br>The Becklin Centre<br>Alma Street<br>LS9 7BE<br>01138556730 (SJUH)<br>01133923204 (LGI) | Liaison Psychiatry for Older People<br>Basement office<br>Beckett Wing SJUH<br>01132067147 |

**<u>Reassess</u>**

Patients should be regularly assessed to ensure delirium is resolving. This should include:

- Observation by the MDT including a night assessment
- Collateral history from family/friends/carers
- Serial AMTS measurements

**<u>Discharge and Follow up</u>**

**Communication with GP's**

- The EDAN should contain
    - Clear documentation of the diagnosis of delirium and its precipitants
    - AMTS at the time of discharge
    - Follow up arrangements

**Follow up**

It is common for delirium to highlight undiagnosed Dementia and be the first presentation of this. It is therefore vital that patients are followed up post discharge for cognitive and functional reassessment.

Follow up may take several forms:

- The liaison psychiatry team may arrange follow up with community mental health teams - they will inform you of this, please make the GP aware in the EDAN.
- The responsible consultant may follow up in out-patients clinic.
- If there is no immediate need for community mental health team follow up it is reasonable to ask the GP to reassess the patient after a few weeks and consider memory service follow up if required.

**Communication with patient and families**

- Ensure the patient and family are aware of the diagnosis
- Inform them of the risk of future episodes of delirium and to observe for early warning signs and seek medical attention if seen.

## Audit and Monitoring Compliance

Senior doctors and nurses should ensure that doctors in training and nurses are able to recognise and treat delirium.

Adherence will be monitored via the following means.

1. Compliance of AMTS recording in LTHT admission booklets yearly audit
2. Completion rates of Dementia CQUIN
3. Care of older people Departmental Mortality meetings review a selection of cases, including the care of patients with delirium.

The results of these will be used as feedback on the performance of doctors and nurses in order to target educational programmes.

Audit results will be presented to the care of elderly audit meeting, which will agree actions arising from the recommendations, and monitor the progress of the actions.

Review date August 2017

## Provenance:

**Ownership:** Acute Medicine Clinical Service Unit; Department of Medicine for Older People

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**Clinical condition:** Delirium

**Target patient group:** All patients admitted to Leeds Teaching hospitals NHS Trust

**Target professional group (clinical competence):** Secondary care doctors, nursing staff, health care assistants, allied health professionals

**Abbreviations Key**

FBC – Full blood count

U&Es – Urea and electrolytes

MSU – Mid stream urine specimen

CRP – C reactive protein

LFT – Liver function tests

Ca – Serum calcium

Mg – Serum magnesium

PO4 – Serum phosphate

TFTs – Thyroid function test

ECG - Electrocardiogram

CXR – Chest X-ray

AXR – Abdominal X-ray

MRI – Magnetic resonance imaging

EEG – Electroencephalography

LP – Lumbar puncture

CSF – Cerebrospinal fluid

SC – Subcutanous administration

IV – Intravenous administration

PR – Per rectum examination

LYPFT - Leeds and York Partnership NHS Foundation Trust

LTHT – Leeds teaching hospitals trust.

MDT – Multi-disciplinary team

AMTS – Abbreviated mental test score

EDAN – Electronic discharge advice notification

Anti-Hu – Neuronal nuclear antibody anti- hu antibody

Anti Ma2 - Neuronal nuclear antibody anti- ma2 antibody

Anti-VGKC - Anti-voltage-gated potassium channel antibodies

Anti-CRMP5/Cv2 – Paraneoplastic antibody

Anti-Ri - Neuronal nuclear antibody anti-ri antibody

Anti-NMDA-R - N-methyl D-aspartate) receptor antibody

Anti Yo - Neuronal nuclear antibody anti- Yo antibody

Anti-Tr - Neuronal nuclear antibody anti- Tr antibody

Evidence Base:

Delirium: Diagnosis, prevention and management; NICE clinical guideline 103. July 2010.

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Hospital Elder life program and short CAM: http://www.hospitalelderlifeprogram.org/delirium-instruments/short-cam/

Scottish delrium tool kit and 4AT: http://www.healthcareimprovementscotland.org/our_work/person-centred_care/opac_improvement_programme/delirium_toolkit.aspx

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Maudsley Prescribing Guidelines in Psychiatry 12th edition.

A. Meta-analyses, randomised controlled trials/systematic reviews of RCTs

B. Robust experimental or observational studies

C. Expert consensus.

D. Leeds consensus. (where no national guidance exists or there is wide disagreement with a level C recommendation or where national guidance documents contradict each other)