

MASCIIP

Management of the older person with a new spinal cord injury

Good practice guidance



Kindly supported by



John Lewis

Foreword

The Multidisciplinary Association of Spinal Cord Injury Professionals (MASCIP) was launched in June 1998 and is a professional association for all disciplines working with, and on behalf of, people with spinal cord injury. MASCIP's prime objective is to provide a national professional forum to promote standards in clinical practice, foster research and encourage the development of health and social care services for people with spinal cord injury.

Following its Annual National Conference in November 2009 where the theme was the 'Older Person with SCI', it became obvious that there is growing interest and concern about this group. There is a dearth of high quality research available on the outcomes and experiences of the older person who have sustained a spinal cord injury. Our first recommendation is that research is required to further understand and optimise the management of older people with SCI.

The general 'one size fits all' approach was felt to be inadequate to address the specific needs of this group. MASCIP therefore set up a working group of multidisciplinary professionals working in the spinal cord injury field to address the specific needs of the older person by publishing, disseminating and promoting National guidelines.

The aim of these guidelines is to achieve best practice and to improve standards for the care of the older person with a spinal cord injury. The guidelines are endorsed by the Spinal Injuries Association and kindly supported by John Lewis

The Guideline Development Group

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Introduction & background

Demographics

People are living longer and remaining more socially and economically active. Currently, older people (65 years of age or older) account for 8% of the world's population, but this number is expected to escalate to 15% in the next four decades.

The US Census Bureau⁽¹⁾ report 'An Ageing World: 2008' reported the following Global estimates: by 2040, the world is projected to have 1.3 billion older people accounting for 14% of the world total population. In less than 10 years it is projected that people aged 65 and over will outnumber children for the first time in history

In the UK today a fifth of the population is over 60.

Over the last 25 years the percentage of the population aged 65 and over increased from 15% in 1984 to 16% in 2009, an increase of 1.7 million people. By 2034, 23% of the population is projected to be aged 65 and over⁽²⁾

Population by age,

UK, 1984, 2009 and 2034

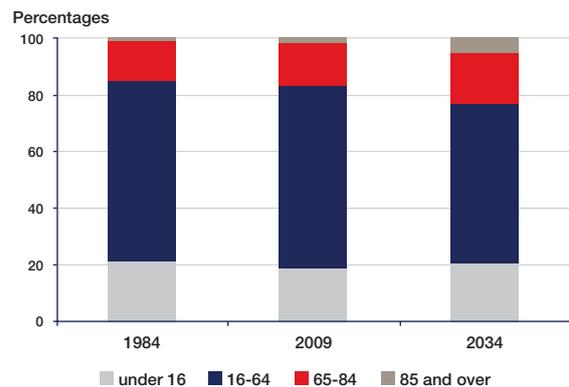


Fig 1: Office of National statistics June 2010

'and in the end, it's not the years in your life that count. It's the life in your years'

ABRAHAM LINCOLN



Spinal cord injury

Spinal cord injury (SCI) is rare with complex multisystem impairments which will result in some degree of loss or reduction in voluntary muscle activity, sensory deprivation and disruption of autonomic function related to the level and severity of the cord damage.

Incidence, aetiology and the demographics of the spinal cord injured population vary world-wide but evidence supports the need for people with spinal cord injury to be managed in a continuum of care, through the initial period of treatment and rehabilitation to on-going lifelong support delivered by a specialist spinal cord injury service designed to meet the needs of the specific patient population served. ⁽³⁻⁷⁾

A study in Philadelphia ⁽⁸⁾, USA, showed that the mechanisms of injury in older persons with SCI differ significantly from younger persons (Fig. 2). Older people were much more likely to sustain an SCI secondary to a fall, with 74% of older people's injuries occurring in this manner. Road traffic accidents were the second most common mechanism of injury, accounting for 13% of SCIs in older persons. Other studies also confirm falls as the commonest mechanism of injury ^(9,10).

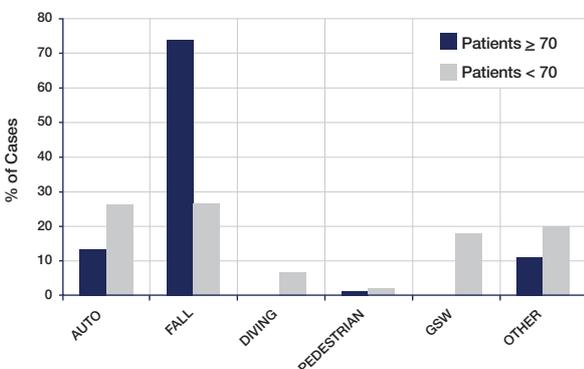


Fig 2: Graph demonstrating the mechanism of trauma for adult patients with SCIs stratified by age.

The Spinal Injuries Association (SIA), the national charity, run by spinal cord injured people for spinal cord injured people to help, support, advise and campaign on all aspects of spinal cord injury conducted a research survey from April 2007 to March 2008 which identified that 32% of respondents were greater than 60 years of age. This also showed a strong correlation between age and number of complications on and during admission ⁽¹¹⁾

Another study ⁽⁶⁾ conducted in the United States in 2007 showed that since 1980 annual admissions for patients with a SCI at a SCI/specialist center had increased 60% but those for older persons with SCI have increased approximately fivefold during that same time period.

The percentage of older persons within the overall SCI population has increased from 4.2% in the early 1980s to 15.4% of admissions in the first half of the current decade, with the mean patient age increasing from 33.7 to 44.3 years during that same time

More worryingly other studies have shown greater co-morbidities ⁽¹²⁻¹⁹⁾ and higher mortality ⁽²⁰⁻³⁰⁾ if an individual was older and sustained a spinal cord injury. One study ⁽³¹⁾ suggests that ageist attitudes are more prevalent in the acute versus the rehabilitation setting and that this can impact on perception of quality of life which can impact on the care that the older person receives.

Current drivers for change

The National Service Framework ⁽³²⁾ for Older People states that NHS services will be provided, regardless of age, on the basis of clinical need alone.

The National Service Framework ⁽³³⁾ for Long Term Conditions requires that provision of healthcare to patients with long-term neurological conditions, of any age, in any healthcare setting, should not compromise management of the patient's neurological condition or personal care.

The National Spinal Cord Injury Strategy Board ⁽³⁴⁾ is, at the time of this publication, developing national standards for a pathway that involves timely referral to specialist SCIC's for all age groups.

Aims

The aim of these guidelines is to bring together published evidence and consensus agreement including user views to advise on clinical practice, to provide guidance for all healthcare professionals working with spinal cord injured individuals in spinal cord injury centre's, in non-specialist areas and the community. It may also be a helpful resource for spinal cord injured individuals, their families and carers.

Physiological changes

Despite stereotypes we know most older people age well; poor perceptions are based on the frail sub-set who frequently use medical services. Generally normal ageing is associated with a reduction in functional reserve capacity in tissues and organs. Figure 3 shows some of the physiological changes that occur with increasing age.

Pharmacology/polypharmacy/prescribing

Changes in pharmacokinetics (The effect the body has on a drug) and pharmacodynamics (The effect the drug has on the body) occur with age and older people are more likely to be taking more medication and these factors increase the risk of drug interactions as well as adverse reactions. 1 in 7 admissions to acute care of the elderly units are wholly or partly due to drug effects or adverse reactions.

Pharmacokinetics and ageing

Absorption - gastric pH ↑ and motility & absorption ↓.

Distribution - reduced total body water, proteins & lean body mass and increased total body fat.

Metabolism - hepatic oxidative pathways impaired (benzodiazepines) and P-450 changes (affects beta blockers, tricyclic antidepressants and verapamil).

Excretion - reduced GFR and change in tubular function (affects aminoglycosides, lithium, digoxin). Low body water leads to reduced volume of distribution for some drugs e.g. aminoglycosides and digoxin. High Fat Stores mean increased volume of distribution for lipid-soluble drugs e.g. phenytoin and diazepam

Pharmacodynamics – This is less predictable in older people. Examples of changes include decreased beta receptor sensitivity, reduced cholinergic receptors, reduced D2/5-HT receptors, reduced GABA/benzodiazepine receptors and enhanced effects of opiates.

It is therefore important to perform regular systematic reviews of prescriptions, check if adequate monitoring has been done, review the indication for, and duration of, treatment, record relevant clinical information, discontinue treatment where appropriate and follow-up and monitor.

Difficulties in establishing diagnoses

There may be delays in presentation of illness and understating of symptoms: "It's only my age". Communication problems (deafness, confusion, aphasia, dysarthria) and impaired memory may create difficulties in obtaining a clear history. Examination may be hampered by restlessness or fatigue. Diseases may present in atypical ways because of altered physiology e.g. impaired homeostatic control of blood pressure or temperature. This may also apply to the trauma and spinal cord injury.

Atypical presentations are often associated with delay in diagnosis and increased mortality and are predictive of future functional decline in community elderly. Functional decline increases the likelihood of further decline and increased mortality ⁽³⁵⁾.

In the older population there is an increased incidence of certain diseases e.g. pernicious anaemia, ischaemic heart disease, hypertension, cardiac failure, diabetes mellitus, hypothyroidism, Parkinson's disease, cerebrovascular disease, motor neurone disease, osteoporosis and osteomalacia. Staff should have a high index of suspicion for these diseases and assess accordingly.

As well as these, there are diseases that usually only occur in older people e.g. polymyalgia rheumatica, cranial arteritis, hyperosmolar non-ketotic diabetic coma and accidental hypothermia. Staff should have an awareness of these conditions.

"It is essential that diagnosis is made immediately to forestall permanent loss of ability. There is a danger of wrong treatment & wrong nursing by generalists as they lack the specialist knowledge to manage SCI & do not always refer to a SCI unit."

Respiratory function

Increased energy of breathing,
Increased airways resistance Increase
in dead-space, Reduced ventilation:
perfusion ratio.

Upper GI

Oesophageal motility ↓, Stomach:
pH ↑, Small bowel absorption ↓,
Liver blood flow, cytochrome P 450 ↓.

Renal

General decline in glomerular filtration
rate. Progressive decline in ability to
excrete a concentrated or a dilute urine.
Delayed or slowed response to
sodium deprivation or a sodium load.

Neuromusculoskeletal

Reduced sensory input including
proprioception, delayed nerve
conduction, reduced numbers of motor
neurones and reduced fast-twitch fibres,
Reduced muscle mass.
Increased risk of falls.
Risk of osteoporosis and fractures -
Low dietary intake of calcium, reduced
endogenous production Vitamin D, Disuse.
Increased foot disease

Vision

Lenses tends to opacify resulting in altered
colour perception and decrease in light
and dark adaptation. Lenses tends to lose
elasticity resulting in increased distance of
focusing, reduced contrast sensitivity and
increased sensitivity to glare

Taste

May have decreased sensitivity to taste

Hearing

Hair cells tend to be lost in the organ of Corti,
Cochlear neurons tend to be lost and there
is stiffening, thickening and calcification
in multiple components of the auditory
apparatus.

Cardiovascular issues

Higher systolic blood pressure
more common, with reduced ability
to increase heart rate.

Increased postural hypotension
Prone to diastolic dysfunction.

GU – men

↓ blood flow may lead to a ↓ in erectile
function, Spermatogenesis continues,
sperm count tends to ↓ & chromosomal
abnormalities tend to ↑.

The prostate tends to ↑ in size, and
prostatic fluid tends to ↓ in amount

GU – women

Reproductive capacity lost at time of
menopause

Ovary, uterus & vagina atrophy post
menopause, Urethra more likely to be
colonised by gram negative organisms
and alterations in mucosa lead to
increased bacterial adherence

Bladder

Impact of primary (natural) ageing:

The incidence of a variety of urinary tract pathologies increases with age, but the most common are urinary tract infections, prostatic enlargement in men and stress incontinence due to pelvic floor weakness in women.

Many men over the age of 60 have enlarged prostates, which gives rise to restricted options for bladder management or the necessity for change in long established bladder management in chronic SCI males. In addition, the characteristics of bladder function may change with age and years of neurogenic bladder management techniques. These changes can lead to impairment of renal function if not detected and addressed.

The tone of the pelvic floor musculature and the function of the urethral sphincter(s) may deteriorate with age which contributes to stress incontinence or difficulties with indwelling urethral catheter retention (in women).

Recommendations

- In the bladder and bowel management of any SCI person, the long term safety and forms of management need to be weighed against their long term acceptability to the individual. In older people the relative weight of these considerations may shift and cognitive and physical impairments can affect that choice.
- Establish, as early as possible, a bladder and bowel management routine that will be sustainable in the community after discharge. In older people the impact of bladder and bowel management on the overall quality of life is a key consideration.
- Plan to preserve energy with appropriate energy-saving devices and low-impact transfer techniques. This may involve considering establishing bowel management in bed rather than on the toilet /commode or using a suprapubic catheter (SPC) rather than intermittent self catheterisation.
- In older males consider that prostatic enlargement can disrupt or obstruct intermittent urethral catheterisation after discharge and the potential for autonomic dysreflexia within this scenario. At an appropriate time consider risk benefits of converting to permanent SPC.
- At an appropriate time, consider the indications for possible surgical intervention and the risks versus benefits of a colostomy which may restore not only efficient and effective bowel emptying but also restore a measure of independence in the older SCI person who retains sufficient dexterity and cognition to independently manage a colostomy system.

Bowel

Impact of primary (natural) ageing:

Taste, salivation and dental health deteriorate as part of the natural ageing processes increasing the potential for changes in established dietary habits. The production of digestive juices declines over the same time causing digestive processes to deteriorate, which reduces the efficient uptake of nutrients. The mucosal lining is subject to a reduction in the number and efficiency of goblet cells, increasing the risk of gastric and duodenal ulceration.

The epithelial lining of the bowel is at increased risk of malignancy with advancing age. Bowel motility deteriorates naturally between the ages of 40-70 increasing the incidence of constipation. As age advances, so potentially will the length of time taken by an individual to maintain an established bowel care programme within a convenient time frame.

The tone of the pelvic floor musculature and the competence of the external anal sphincter deteriorate with age reducing its contribution towards preventing faecal incontinence.

Deficiencies or inadequacies in fluid and dietary intake can increase the potential for constipation and diarrhoea.

The impact of SCI on the older adult:

Ensure during the initial discharge planning that the older SCI person and any carers understand that maintaining efficient and effective bladder and bowel management is a dynamic process and that the frequency of change is dictated primarily by;

- the established level and type of neurological bladder and bowel dysfunction
- the measurable impact of the SCI upon physical performance and dependency upon others
- the measurable impact of co-morbid factors upon physical performance and dependency upon others
- pre-injury urinary tract problems and bowel routine
- their rehabilitation experience and education giving them sufficient understanding of how to manage their neurogenic bladder and bowel dysfunction and how to respond to changes or problems

Nutrition

A recent UK based multicentre study found 1 in 5 patients admitted to a SCI centre were aged 60 or above and 1 in 3 were at risk of malnutrition⁽³⁶⁾. Nutritional status has been shown to be associated with poorer clinical outcomes and increased healthcare costs.⁽³⁷⁻³⁹⁾ This is because the poor nutritional state of many patients often goes unrecognised and possibly a lack of awareness of malnutrition by health professionals who receive little training on nutritional issues.⁽⁴⁰⁾

Reasons for poor nutritional status in older people are multifactorial and include the physiological, psychological and social changes associated with ageing which affect food intake and body weight, exacerbated by the presence of illness. Older people who are already malnourished at home may be at a disadvantage if admitted to hospital for treatment. Reduced or loss of motor function after SCI will create difficulties in getting fluids or food to mouth and chewing or swallowing difficulties may be seen in these patients. Additional fluid intake is encouraged among patients with SCI to promote optimal stool consistency and prevent the development of calculi⁽⁴¹⁾.

The nutritional needs and management of patients who have sustained a SCI and are still recovering from the acute trauma or those who are stable and undergoing rehabilitation are quite different^(3,42). Increased or decreased energy intake and requirements depend on the phase of SCI, age, gender and mode of ambulation. Weight loss is common during the acute and early rehabilitation phase of SCI. There is reduced activity, and muscle mass is lost, with an attendant decrease in energy requirements. In the long term, there is a tendency for a person with a SCI to gain weight. Energy needs tend to decrease over time post-injury relative to loss of muscle mass. The recommendation has been made that desirable body weights for persons with a SCI may be lower than for others⁽⁴³⁾. Lower weight may help with transfer as well as decreasing the incidence of chronic nutrition related complications (NRCs) such as pressure ulcers, renal calculi, obesity, diabetes and cardiovascular disease^(44,45). Underlying disease or interventions such as surgery after SCI increase nutritional demands, so patients who have a poor appetite or difficulty eating will lose weight with an increased risk of postoperative complications^(44,46).

Evidence suggests that dietetic therapy provided to patients with a SCI by a registered dietician results in improved nutritional related-patient outcomes via adequate intake and management of weight^(44,46).

National and international reports^(42,44,47) have highlighted the importance of nutritional screening, which is a multidisciplinary responsibility, as an important step in fighting malnutrition.

Recommendations

- Clinicians should be aware of the physiological changes that occur with normal ageing.
- Clinicians should be aware of the differences in pharmacokinetics and pharmacodynamics in older adults and prescribe accordingly.
- Clinicians should perform regular systematic reviews of prescriptions, check if adequate monitoring has been done, review the indication for, and duration of, treatment, record relevant clinical information, discontinue treatment where appropriate and follow-up and monitor.
- Clinicians should be aware of the differences in establishing diagnoses in older adults and have knowledge of diseases and disease presentation in older adults. This should include screening all older patients for particular diseases with full blood count, haematinics, urea and electrolytes, liver function tests, thyroid function tests, and blood sugar.
- Patients who sustained their injury by a fall should also have further assessment according to local falls guidelines.
- SCIC's should have access to specialists in care of the elderly and ask for advice where relevant.
- Standard practice in prevention of pressure ulcers should consider the likelihood that skin tolerance in older people is further compromised.
- Clinicians should have ongoing training on the importance and value of nutrition screening.
- All patients should have nutritional assessment including measuring weight and body mass index.
- SCIC's should have access to nutritional advice from a dietician and a local policy to manage malnutrition.
- Prevention of chronic nutrition related complications including obesity, coronary heart disease and diabetes should be part of the SCIC's patient education programme.
- Older people still have a sexuality that should be respected. Older people should be offered and have the opportunity to discuss these issues with a suitably experienced member of clinical staff.

Mortality

It is widely believed that recent advances in healthcare have meant that we can all expect to live longer. Life expectancy at birth in the UK has reached its highest level on record for both males and females. A newborn baby boy could expect to live 77.2 years and a newborn baby girl 81.5 years if mortality rates remain the same as they were in 2005–07⁽⁴⁸⁾.

There is evidence for similar trends in the Spinal Cord injury population. In 1994 a study⁽²¹⁾ from Illinois, USA looking at early clinical outcomes in those over the age of 50 who sustained a spinal cord injury during the first 4 months identified an overall mortality of 23%. A complete (AIS Grade A) cord injury mortality rate was 60% in this age group. All patients over 65 years of age with complete cord injuries died. A more recent study in 2007⁽⁸⁾ showed that among older persons with complete SCI's in the series, the in-hospital mortality rate was 46% and the 1-year mortality rate 66%. In the surgical case series reported by Jackson et al⁽⁴⁹⁾, an increased mortality rate (20% in-hospital mortality rate) was also observed in patients with complete SCI's. Jackson and associates retrospectively reviewed a series of 74 cases in which older persons were treated surgically for traumatic cervical spine injuries and reported that the mortality rate during initial hospitalization was fivefold higher in patients older than 65 years of age.

These studies are crucial as they address the important issue of survival in the first few months post injury.

More recently and more positively, alternative studies have found that age in itself does not affect rehabilitation outcomes or neurological recovery.^(15,50-52)

De Vivo's studies^(25,53) looking at life expectancy in the Spinal Cord injury population has not been reproduced in recent years.

Current Guidance available on end of life issues include 'Advance decisions, advance statements and living wills' Age UK⁽⁵⁴⁾ October 2009, 'PLANNING FOR YOUR FUTURE CARE A Guide' NHS, March 2009⁽⁵⁵⁾ and 'Advance Care Planning: concise evidence-based guidelines' Royal College of Physicians February 2009⁽⁵⁶⁾.

Recommendations

- A “do not resuscitate” decision should not be made solely on the basis of the person's age or perceived quality of life by the treating team. Reference to local resuscitation guidelines should be made.
- Every older patient should be made aware of prognostic factors including mortality data and should be allowed to make a fully informed decision regarding their own resuscitation status where possible or a decision by the responsible medical team should be made in conjunction with the multidisciplinary team and family when appropriate.
- Advanced directives and living wills should be taken into account by the treating team but should not preclude or negate keeping the person fully informed and giving them an opportunity to confirm or change their previous decision. A mentally competent individual has the absolute right to refuse medical treatment for any reason and a valid advance directive for the refusal of treatment is binding in the event that the person loses capacity.
- The professional should have adequate knowledge about the disease, treatment and the particular individual to be able to give the patient all the information needed to express their preferences to make the plan.⁽⁵⁶⁾

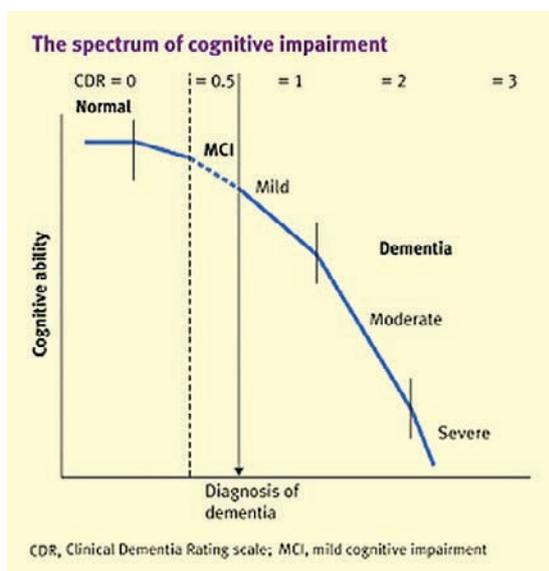
Every older patient should be made aware of prognostic factors including mortality data and should be allowed to make a fully informed decision regarding their own resuscitation status where possible.

Cognitive & psychiatric issues

Cognitive decline

Though most elderly people do not suffer from dementia it is true to say that beginning early in adulthood cognitive performance begins to decline. For some people, eg in their fifties, cognitive performance will not be as sharp as in earlier years but they still function well within the normal range. Bedside screening tools commonly used are included in Appendix 1. The following have been suggested as characteristic of cognition and behaviour in later life ⁽⁵⁷⁾

- Reaction times (RT) increase steadily with age
- Most of this increase appears to be due to slower central processing speeds rather than the slowing of sensory transmission or muscle movement
- To avoid 'costly' errors in performance, which take longer to correct, caution also increases with age. Given the choice, older people avoid errors by sacrificing speed for accuracy. This strategy can result in superior accuracy among older compared with younger people on a variety of tasks, including driving (acknowledged by insurance companies)
- Where speed of performance is imposed, either in the laboratory or in life, older people tend to be more disadvantaged than the young
- While age-related slowing appears psychologically pervasive, physical and intellectual training can improve performance skills



Specific psychiatric conditions in the elderly in hospital

1: Delirium

Both delirium and dementia have become increasingly common with the advancing age of our population. While dementia has become increasingly well known, delirium, though not less common in hospital populations, has not.

Delirium is also known as Acute Confusional state or acute organic brain syndrome. The essential feature is an abrupt, recent onset of change in cognitive function due to underlying pathology, whether intracranial or systemic. Delirium is a syndrome characterized by concurrent disturbances of consciousness and attention, perception, thinking, memory, psychomotor behaviour, emotion, and the sleep-wake cycle. The delirious state is transient and of fluctuating intensity; most cases recover within 4 weeks or less. However, delirium may last, with fluctuations, for up to 6 months (so-called subacute confusional state). Patients that have suffered delirium have increased mortality on long term follow-up, so good assessment and care are essential.

Delirium can take one of three forms; hyperactive, hypoactive or mixed. In the hyperactive state the patient may be agitated and paranoid. In the hypoactive they may be withdrawn and quiet and still paranoid. Delirium may occur on its own or be superimposed on dementia. Either way it is important to recognise it. If a patient presents with an acute change in their mental state, either hyperactive or hyperactive or fluctuating and have inattention and either disorganised thinking or fluctuating level of consciousness or both they are likely to be suffering from delirium. The Confusion Assessment Method is a simple clinical tool to assist nurses, doctors and others to ascertain the presence of delirium in the hospital and its use is recommended. See Appendix 2.

A wide range of conditions may cause delirium. The most common causes after acute spinal cord injury are infection, head injury, respiratory insufficiency and opioid and other analgesic medication. Other causes include drug interactions, electrolyte disturbances and hypoglycaemia.

Detection and correction of such abnormalities are essential in the management of delirium. Other relevant action includes the creation of an appropriate nursing environment and appropriate support and explanation for patient and relatives. In some cases haloperidol may be required, usually a small dose sufficing. The abbreviated guidelines for the Management of Delirium developed by the liaison psychiatry team at LSCIC RNOH summarise essential points in the management of delirium (Appendix 3). Further information is available in the NICE Delirium Clinical Guideline 103, Published July 2010 and Gordon, H., Ikkos, G (2009) Delirium, Foundation Years Journal, ^{3(7),42-51}

Where there is uncertainty about the diagnosis and treatment of delirium a liaison psychiatrist, an old age psychiatrist or specialist on care of the elderly must be called to assist.

2: Dementia

Always consider the possibility that a patient presenting with cognitive problems may have a delirium or depression and not dementia. However dementia is common in hospital inpatient populations.

Dementia is normally characterised by the presence of all 4 of the following features:

- (a) impairment in short- and long-term memory;
- (b) impairment in abstract thinking, judgement, higher cortical function, or personality change;
- (c) memory impairment and intellectual impairment cause significant social and occupational impairments;
- (d) the occurrence of these when patients are not in a state of delirium

Common Varieties of Dementia include Alzheimer's Disease (AD) 50%, Mixed Alzheimer's and Vascular Disease c.15% Vascular Dementia (VaD) 15%, Lewy Body Dementia (DLB) 15%, Others 5% (E.g. Frontotemporal Dementia, FTD and Alcohol associated dementia). (See Appendix 4 for further information)

Assessment of suspected dementia should include other members of the multidisciplinary team, e.g. functional assessment of activities of daily living by the occupational therapist. Therapists are often in the best position to make clear what the real level of cognitive functioning of the patient is.

Investigations of suspected dementia should include the following:

Always: Full blood count, U+E, TFT's, LFT's, B12/ Folate, ESR/CRP. Calcium, blood glucose, MRI/CT head Scan and mid stream urine sample if delirium is a possibility.

As required: Neuropsychology, Syphilis serology, HIV Testing, CXR, ECG, EEG, arterial blood gases.

Where there is uncertainty about the diagnosis and treatment of dementia a liaison psychiatrist, an old age psychiatrist or specialist on care of the elderly must be called to assist. All patients with a confirmed diagnosis of dementia should also be referred.

3: Depression

Observed cognitive impairment in old age may be due to depression rather than delirium or dementia. A past history of depression, recent onset of cognitive changes and frequent "don't know" responses to questions may suggest the diagnosis. It is important to be vigilant about this and assess all cases fully for the presence of depression and where necessary treat appropriately and specifically.

Other presentations of depression which are more common in the elderly than working age people are "Hypochondriasis" and severe psychomotor retardation (marked slowing and reduction in spontaneous speech and gestures). Depression and dementia may co-exist and depression may be more common in vascular dementia compared to other forms of dementia.

Given its often high prevalence it is also important to screen all older people, as well as younger persons for depression. NICE recommends that we ask all patients:

During the last month, have you often been bothered by:

- feeling down, depressed or hopeless?
- having little interest or pleasure in doing things?

If the answer to either question is yes the patient requires more detailed assessment for depression.

The Geriatric Depression Scale ⁽⁶⁹⁾, is a slightly more comprehensive screening tool for depression, which has been validated for older and younger adults for use in hospital and in the community.

Special topics

Pain

Older people with dementia or other forms of cognitive impairment or severe mental illness may not be able to communicate effectively about pain. In such cases it is important to attend to non verbal communication and behaviours including altered interpersonal interactions, changes in activity patterns or routines, mental status changes and physiological changes. The “Abbey Pain Scale”⁽⁶⁰⁾ The Assessment of Pain in Older People: National Guidelines, has been developed specifically for people with dementia who can not vocalise about pain. Clinical staff in Spinal Cord Injury Centres may find it useful in such circumstances.

Mental capacity

No automatic presumption should be made that the mental capacity of an elderly person, even a person with delirium or dementia is impaired. Nevertheless the questions about the mental capacity of such patients will be raised regularly and appropriately. All clinicians need to have a thorough working knowledge of the Mental Capacity Act 2005⁽⁶¹⁾. Appendix 5 presents a brief overview of practical issues, originally developed for the Royal National Orthopaedic Hospital.

Recommendations

- All patients over the age of 65 should receive cognitive screening
- Staff should be aware of cognitive impairments and deliver rehabilitation accordingly
- Where there is uncertainty about the diagnosis and treatment of delirium or dementia a liaison psychiatrist, an old age psychiatrist or specialist in care of the elderly must be called to assist. All patients with a confirmed diagnosis of dementia should also been referred for specialist input
- As per NICE guideline, all patients should be asked screening questions for depression and more detailed assessment is required if any positive answers are given
- All clinicians need to have a thorough working knowledge of the Mental Capacity Act 2005⁽⁶¹⁾
- Shorter sessions with fewer topics that have less complex material should be offered to assist those with decreased concentration and attention
- Structured sessions with contextual information should be offered to assist those with slowed information processing speed
- Individuals should be offered paced information that is repeated as necessary with understanding and retention checked for those with reduced memory
- Problems should be broken down into component parts to simplify the task for those with reduced problem solving skills
- Patients with major behavioural problems especially those with dementia should have access to specialist psychiatry service

“When the going gets tough, I find it helps to remember ‘to press on regardless’ like the RAF in WW2”.

Social issues

Society expects more and more from older people, and at the same time, older people expect more of and for themselves. Many older adults view improved levels of health and fitness as an opportunity to enjoy travel, explore new interests including new work/professional activities. But these opportunities are accompanied, for many people, by a sense of challenge and stress.

Newly injured older adults may well still be involved in the care and support of their own elderly parents or disabled siblings; and their children may increasingly look to them for support with childcare at a time of employment pressure and escalating childcare costs. A new spinal cord injury can directly affect the lives and opportunities of three generations.

When working with older people it is important to engage with younger family members (e.g. grown up children) as sources of information and support. However it is important to be aware that some times they may not act in the best interests of the patients. Families can occasionally even be a source of abuse, whether emotional, physical or financial. Though the clinician must keep an open mind in relation to this it is important to emphasise the warmth and strengths that families can bring and always keep this in mind. Families are more important to people than professionals.

Ageing partners may also be a source of concern. More than 50% of women over 65 are widowed and more than 80% over 85. Such women may have less income than those continuing having a partner. Widowhood is less common among men (less than 20% in over 65's and less than 50% in over 85's) but such men are more likely than widowed women to be socially isolated.

Individuals of all ages vary widely in their reaction and adaptation to spinal cord injury and the rehabilitation process. Older people may well have a great range of experience to draw from, and may be able to mobilise personal resources based on life experience and solutions learned from previous life crises and events. Similarly, they may be anxious about the future and pre-occupied by the demands on them. There is anecdotal evidence that older adults tend to work hard at rehabilitation, but may doubt their abilities and potential – as with any other age group, there is wide variation in this.

Public policy can appear to discriminate against newly injured older adults. Disability living allowance is not available to newly-injured older adults, as a DLA claim cannot be made after the person's 65th birthday.

Public policy in this area has long been considered discriminatory, but in the current climate, there seems little prospect for a change of policy in this area.

Community services also sometimes operate policies that seem discriminatory. At age 65, community based services often transfer individuals from teams aimed at younger adults (with an underlying philosophy of rehabilitation and improving function) to teams aimed at older adults (where, if no 'improvement' is observed or seems likely, services such as community physiotherapy is withdrawn). To prevent such discrimination a flexible approach to need should be adopted, rather than an excessively rigid focussing on outcomes.

As with any newly injured person, detailed exploration and consideration of the best treatment and rehabilitation options should be undertaken. Older adults may well have particular factors in their social circumstances that may influence, but should not override, preferred options e.g. a newly-injured older adult may prefer to receive non-specialist care closer to home than be treated in a Spinal cord Injury Centre that limits their spouses' ability to visit them.

A significant number of adults with new spinal cord injuries are initially discharged from specialised Centres to some form of interim care provision. This should not be assumed to be a long term placement because the person is older and relevant services should work together to facilitate the patients long term preference.

In summary, some aspects of the rehabilitation process may be hard for older people, in either physical or emotional terms. However many older adults will have gained from life experiences that help and sustain them through the crisis of a spinal cord injury.

Recommendations

- Efforts should be made to find processes, timescales and methods of teaching and assessment that are appropriate to individual needs, skills and situation.
- All involved in the care of newly injured older adults should resist practices that are discriminatory. Older adults should enjoy the same rights to holistic, appropriate and considered interventions at all stages in their spinal cord injured lifetime.

Cultural considerations

The term culture and its association is complex and consists of many domains. Broadly it concerns a persons spiritual values as well as their religion based cultural and social norms incorporating a hugely diverse set of behaviours that demand acknowledgement and attention by healthcare professionals. ⁽⁶³⁻⁶⁵⁾

It is important we are able to recognise the older person's usual cultural, spiritual and religious habits, as there is evidence tradition and routines becomes increasingly important to older people.

Events or circumstances that may threaten the stability of spirituality in older adults include:

- Losses (changed mobility or skills, job loss or retirement), challenged value systems (forced retirement from long tenured job), Separation from religion and/or culture (move from native country or church), death (of a loved one), personal and family disaster (bankruptcy or estrangement of family member) or changes in environment, health or self concept (move to nursing home or catastrophic traumatic illness). ⁽⁶⁶⁻⁶⁹⁾

Symptoms or signs that may indicate unstable spirituality include:

- Threats to self, insecurity, lacking self-esteem, seeking out spiritual assistance, questioning one's existence or meaning of life, depression, doubts, despair, guilt, boredom or anger.

Professional and personal ways to assist individuals include:

- Assess available and appropriate supports
- Identify a comforting environment
- Assess past coping abilities
- Identify changes needed to improve situation and abilities
- Re-establishment of former routines as able
- Refer to chaplain or appropriate professional
- Prayer
- Visualisation
- Artistic expression
- Healing
- Memory, reminiscence therapy
- Medication
- Relaxation
- Professional psychiatric therapy

Recommendations

- Professionals must be equipped with basic knowledge and source information as the need arises.
- Individuals should be enabled to, and given the opportunity to, participate in their usual cultural activities and roles as far as is reasonably practicable.
- Specific things to consider include family structure and roles, medications, language preferences, dietary needs/ preferences, prayer times including festivals, ward gender mix, rehabilitation timetable, chaplaincy support, clothing preferences and personal hygiene preferences and other needs for example the need for flowing water.
- This information serves only as a guideline and specific detail should be sourced as appropriate for the patient.

MANAGEMENT OF THE OLDER PERSON WITH A NEW SPINAL CORD INJURY

Overview of recommendations - pull-out

Research is required to further understand, and optimise the management of older people with spinal cord injury.

Physiological Changes

- In the bladder and bowel management of any SCI person, the long term safety and forms of management need to be weighed against their long term acceptability to the individual. In older people the relative weight of these considerations may shift and cognitive and physical impairments can affect that choice.
- Establish, as early as possible, a bladder and bowel management routine that will be sustainable in the community after discharge. In older people the impact of bladder and bowel management on the overall quality of life is a key consideration.



- Plan to preserve energy with appropriate energy-saving devices and low-impact transfer techniques. This may involve considering establishing bowel management in bed rather than on the toilet/commode or using a suprapubic catheter (SPC) rather than intermittent self catheterisation
- In older males consider that prostatic enlargement can disrupt or obstruct intermittent urethral catheterisation after discharge and the potential for autonomic dysreflexia within this scenario. At an appropriate time consider risk benefits of converting to permanent SPC.
- At an appropriate time, consider the indications for possible surgical intervention and the risks versus benefits of a colostomy which may restore not only efficient and effective bowel emptying but also restore a measure of independence in the older SCI person who retains sufficient dexterity and cognition to independently manage a colostomy system.
- Clinicians should be aware of the physiological changes that occur with normal ageing.
- Clinicians should be aware of the differences in pharmacokinetics and pharmacodynamics in older adults and prescribe accordingly.
- Clinicians should perform regular systematic reviews of prescriptions, check if adequate monitoring has been done, review the indication for, and duration of, treatment, record relevant clinical information, discontinue treatment where appropriate and follow-up and monitor.
- Clinicians should be aware of the differences in establishing diagnoses in older adults and have knowledge of diseases and disease presentation in older adults. This should include screening all older patients for particular diseases with full blood count, haematinics, urea and electrolytes, liver function tests, thyroid function tests, and blood sugar.
- Patients who sustained their injury by a fall should also have further assessment according to local falls guidelines.
- SCIC's should have access to specialists in care of the elderly and ask for advice where relevant.
- Standard practice in prevention of pressure ulcers should consider the likelihood that skin tolerance in older people is further compromised.
- Clinicians should have ongoing training on the importance and value of nutrition screening.
- All patients should have nutritional assessment including measuring weight and body mass index.
- SCIC's should have access to nutritional advice from a dietician and a local policy to manage malnutrition.

Overview of recommendations - pull-out

- Prevention of chronic nutrition related complications including obesity, coronary heart disease and diabetes should be part of the SCIC's patient education programme.
- Older people still have a sexuality that should be respected. Older people should be offered and have the opportunity to discuss these issues with a suitably experienced member of clinical staff.
- A "do not resuscitate" decision should not be made solely on the basis of the person's age or perceived quality of life by the treating team. Reference to local resuscitation guidelines should be made.



- Every older patient should be made aware of prognostic factors including mortality data and should be allowed to make a fully informed decision regarding their own resuscitation status where possible or a decision by the responsible medical team should be made in conjunction with the multidisciplinary team and family when appropriate.
- Advanced directives and living wills should be taken into account by the treating team but should not preclude or negate keeping the person fully informed and giving them an opportunity to confirm or change their previous decision. A mentally competent individual has the absolute right to refuse medical treatment for any reason and a valid advance directive for the refusal of treatment is binding in the event that the person loses capacity.
- The professional should have adequate knowledge about the disease, treatment and the particular individual to be able to give the patient all the information needed to express their preferences to make the plan.

Cognitive & Psychiatric Issues

- All patients over the age of 65 should receive cognitive screening
- Staff should be aware of cognitive impairments and deliver rehabilitation accordingly
- Where there is uncertainty about the diagnosis and treatment of delirium or dementia a liaison psychiatrist, an old age psychiatrist or specialist in care of the elderly must be called to assist. All patients with a confirmed diagnosis of dementia should also be referred for specialist input
- As per NICE guideline, all patients should be asked screening questions for depression and more detailed assessment is required if any positive answers are given
- All clinicians need to have a thorough working knowledge of the Mental Capacity Act 2005
- Shorter sessions with fewer topics that have less complex material should be offered to assist those with decreased concentration and attention
- Structured sessions with contextual information should be offered to assist those with slowed information processing speed
- Individuals should be offered paced information that is repeated as necessary with understanding and retention checked for those with reduced memory
- Problems should be broken down into component parts to simplify the task for those with reduced problem solving skills
- Patients with major behavioural problems especially those with dementia should have access to specialist psychiatry service

Social Issues

- Efforts should be made to find processes, timescales and methods of teaching and assessment that are appropriate to individual needs, skills and situation.
- All involved in the care of newly injured older adults should resist practices that are discriminatory. Older adults should enjoy the same rights to holistic, appropriate and considered interventions at all stages in their spinal cord injured lifetime.

Overview of recommendations - pull-out



Cultural considerations

- Professionals must be equipped with basic knowledge and source information as the need arises.
- Individuals should be enabled to, and given the opportunity to, participate in their usual cultural activities and roles as far as is reasonably practicable.
- Specific things to consider include family structure and roles, medications, language preferences, dietary needs/ preferences, prayer times including festivals, ward gender mix, rehabilitation timetable, chaplaincy support, clothing preferences and personal hygiene preferences and other needs for example the need for flowing water.

Clinical governance

Organisations working with older people with SCI:

- Should have knowledge of and implement, where appropriate the British Geriatrics Society Best Practice Guide Clinical Governance and Older People and the NSF for older people
- Should have a Clinical Lead in Governance for older people.
- Should have MDT meetings focussed on older persons with audit (to include relevant NICE and BGS guidelines) and “lessons learned”.
- Have a duty to ensure there are procedures in place to deal with alleged or suspected cases of abuse against vulnerable adults.

Staff education & awareness

- Appropriate training for all staff in both SCI and physiological effects of ageing
- Identification of Older People Specialist Services for consultation
- Interdisciplinary working with clear allocation of roles and responsibilities to each profession
- Identification of patients at high risk of falling and appropriate referral to specialist falls service

Health promotion

- Health and wellbeing of older people should be ‘promoted through a co-ordinated programme of action’ in order to extend the healthy life of older people.
- Education topics should include: Spinal cord anatomy and physiology, Primary effects of spinal cord injury, Individual nature of their injury, Secondary complications of spinal cord injury and Ageing with a spinal cord injury.
- Rehabilitation needs to take into account differences in lifestyle, culture and religious beliefs. An awareness of these differences and patient led goal planning should facilitate older patients to achieve their maximal verbal and/or physical independence in accordance with their level of injury and associated conditions.
- In addition, methods for maintaining cognitive health should be included under the umbrella of health promotion. ‘Cognition is like a muscle: exercising your brain keeps it strong and viable, but if underused, cognitive ability atrophies.’



Overview of recommendations pull-out

- Education delivery should be tailored to meet the individual needs of each patient being modified to take into account their preferred learning style, cognitive ability and any sensory deficits.
- The following topics should be included within the rehabilitation process and any issues addressed by the appropriate professionals.
Assessment & promotion of:
 - appropriate physical activity/exercise
 - meaningful cognitive engagement
 - meaningful social interaction
 - healthy eating
 - adequate sleep
 - psychological support to develop appropriate coping strategies
 - appropriate awareness of medications and associated side effects
 - vocational rehabilitation
- Discharge should be supported by referral to appropriate local services to aid the transition and maintenance of skills between hospital and home.
- Referral to community services for ongoing therapeutic input should be based on need and not misperceptions about age.
- Age appropriate peer support should be sought via national associated charitable organisations and local community support services.
- Specialist advice regarding the specific changes to Benefits for Older People should be provided.

Models of care

With a lack of evidence to support preferred models of care for anyone with a spinal cord injury the following are recommendations for specific care in the management of Older People who acquire a spinal cord injury:

- All Older People with a spinal cord injury should be referred to a SCIC within 4 hours of their injury as per adult policy.
- Older patients should be offered the same access rights to specialist SCI services as younger patients including outreach, initial rehabilitation, re-admission and out patient services for lifelong support.
- In light of higher mortality rates and lower levels of improvement despite longer rehabilitation stays older people should be offered alternative services on an individual basis to enable them to return to their home/community as soon as possible.
- All patients over the age of 65 should have cognitive assessment on admission to allow early identification and individual management of impairments.



Clinical governance

Specialists caring for older people who carry out comprehensive assessments both in hospital and the community regularly come into contact with frail older people and should lead clinical governance processes. Clinical governance should be working to improve the quality of services and safeguard high standards of care by creating an environment in which excellence can flourish.

Individual clinicians are responsible for their own practice and should maintain high standards of care. A clinician's first responsibility must be to the patient and their safety and they must promote this within the broader multidisciplinary team.



Clinical governance should be working to improve the quality of services and safeguard high standards of care by creating an environment in which excellence can flourish.

Recommendations

Organisations working with older people with SCI:

- Should have knowledge of and implement, where appropriate the British Geriatrics Society Best Practice Guide Clinical Governance and Older ^(32,70-76) People (Good Practice Guide 1.5 published May 2008) and the NSF for older people ⁽³²⁾
- Should have a Clinical Lead in Governance for older people.
- Should have MDT meetings focussed on older persons with audit (to include relevant NICE and BGS guidelines) and “lessons learned”.
- Have a duty to ensure there are procedures in place to deal with alleged or suspected cases of abuse against vulnerable adults.

Staff education & awareness

All staff working with Older People with a spinal cord injury require specific education and training in both the management of those with a SCI and the physiological effects of ageing.

Standard 4 of the NSF framework ⁽³²⁾ for older people recommends that older patients receive specialist care from staff who have the right set of skills to meet their patients' needs. In order to achieve this, the learning needs of the workforce need to be identified and staff supported and provided with the necessary training with access to Older People Specialist Services.

It is important that staff should be aware of their specific roles and responsibilities in order to be able to disseminate information clearly to each other and raise issues within the MDT appropriately. This is supported by Quality standard 4 of the NSF ⁽³³⁾ for long term conditions which advocates the benefits of co-ordinated interdisciplinary working. It is important that these roles are made clear to the patient to aid their understanding of the provision of different services.

As falling is a significant cause of spinal cord injury in older people it is necessary that all high risk patients are identified and are referred to a specialist falls service ⁽³²⁾ (Standard 6 NSF for older people). It is also important that all staff are aware of how to assess the pertinent intrinsic and extrinsic factors, in order to identify the level of risk and develop an individually tailored programme to reduce the risk of subsequent falls.

Recommendations:

- Appropriate training for all staff in both SCI and physiological effects of ageing
- Identification of Older People Specialist Services for consultation
- Interdisciplinary working with clear allocation of roles and responsibilities to each profession
- Identification of patients at high risk of falling and appropriate referral to specialist falls service

The NSF framework for older people recommends that older patients receive specialist care from staff who have the right set of skills to meet their patients' needs.

Health promotion

Recommendations

- Health and wellbeing of older people should be 'promoted through a co-ordinated programme of action' in order to extend the healthy life of older people ⁽³²⁾ (Standard Eight of the NSF for Older People).
- **Education topics should include:**
 - Spinal cord anatomy and physiology
 - Primary effects of spinal cord injury
 - Individual nature of their injury
 - Secondary complications of spinal cord injury
 - Ageing with a spinal cord injury
- Rehabilitation needs to take into account differences in lifestyle, culture and religious beliefs. An awareness of these differences and patient led goal planning should facilitate older patients to achieve their maximal verbal and/or physical independence in accordance with their level of injury and associated conditions.
- Methods for maintaining cognitive health should be included under the umbrella of health promotion. 'Cognition is like a muscle: exercising your brain keeps it strong and viable, but if underused, cognitive ability atrophies.' ⁽⁷⁷⁾
- Education delivery should be tailored to meet the individual needs of each patient being modified to take into account their preferred learning style, cognitive ability and any sensory deficits.
- The following topics should be included within the rehabilitation process and any issues addressed by the appropriate professionals.

- **Assessment and promotion of:**

- appropriate physical activity/exercise
- meaningful cognitive engagement
- meaningful social interaction
- healthy eating
- adequate sleep
- psychological support to develop appropriate coping strategies
- appropriate awareness of medications and associated side effects
- vocational rehabilitation

Some of these topics are covered in more detail in other chapters of these guidelines.



Models of care

The management of people with a SCI is recognised as a specialist field of practice requiring expert knowledge to provide optimal care throughout the lifetime of the patient. As such, any person who sustains a spinal cord injury should be referred to a Specialist SCIC for a timely, individually tailored rehabilitation programme to manage initial and subsequent consequences of SCI and to optimise individual outcomes regardless of their age.



“When an older SCI patient is faced with the physical need to stretch or push a bit beyond their apparent ability, saying the mantra “I can & I will” works wonders & gets you further. I have proved this to myself much to my amazement! Continuing my daily Physio & OT routines after discharge certainly enabled me to achieve much more than had been anticipated. It is good to push beyond professional’s expectations!”

Recommendations:

With a lack of evidence to support preferred models of care for anyone with a spinal cord injury(11) the following are recommendations for specific care in the management of Older People who acquire a spinal cord injury:

- All Older People with a spinal cord injury should be referred to a SCIC within 4 hours of their injury as per adult policy⁽³⁴⁾
- Older patients should be offered the same access rights to specialist SCI services as younger patients including outreach, initial rehabilitation, re-admission and out patient services for lifelong support⁽⁷⁸⁾.
- In light of higher mortality rates^(8;14;51;79;80) and lower levels of improvement despite longer rehabilitation stays^(52;81-84) older people should be offered alternative services on an individual basis to enable them to return to their home/community as soon as possible.
- All patients over the age of 65 should have cognitive assessment on admission to allow early identification and individual management of impairments.
- Discharge should be supported by referral to appropriate local services to aid the transition and maintenance of skills between hospital and home.
- Referral to community services for ongoing therapeutic input should be based on need and not misperceptions about age.
- Age appropriate peer support should be sought via national associated charitable organisations and local community support services.
- Specialist advice regarding the specific changes to Benefits for Older People should be provided.

Appendices

Appendix 1 Cognitive assessment tools

Abbreviated mental test

- Age of patient
- D.O.B.
- Address given for recall at end of test
- Time of Day (to nearest hour)
- Year
- Place (name of hospital)
- Year of first or second World War
- Name of present Monarch
- Count backwards 20-1
- Identification of two persons (Dr, nurse etc)
- Recall of address

Reproduced from Hodkinson HM; Evaluation of a mental test score for assessment of mental impairment in the elderly. Age Ageing. 1972 Nov;1(4):233-8. The cut-point for the AMT is taken to be 7/10 or less in elderly. That suggests cognitive impairment which may need further assessment.

6 Item cognitive impairment test (6-CIT)

1. What year is it?

Correct	0
Incorrect	4

2. What month is it?

Correct	0
Incorrect	3

Remember the following address:
John/Brown/42/West Street/Bedford

3. What time is it?

Correct	0
Incorrect	3

4. Count backwards 20-1

Correct	0
one Error	2
More than one error	4

5. Months of yr backwards

Correct	0
one Error	2
More than one error	4

6. Repeat memory phrase

Correct	0
one Error	2
two Errors	4
three Errors	6
four Errors	8
All incorrect	10

A score of 8 or more on the 6-CIT is suggestive of significant cognitive impairment, though this may be temporary, permanent or fluctuating and the potential relevant causes may be varied and sometimes multifactorial.

Appendix 2 The confusion assessment method

1. Acute Onset
2. Inattention
3. Disorganised Thinking
4. Altered Level of Consciousness

Diagnosis of Delirium indicated in the presence of 1 + 2 and 3 or 4 or both 3 and 4.

Inouye, S., van Dyck, C. et. al,1990. Clarifying Confusion: The Confusion Assessment Method, Annals of Internal Medicine,

Appendix 3

Delirium management Guidelines

LIAISON PSYCHIATRY SERVICE RNOH

Modification of environmental factors in treating delirium

Providing support and orientation

- Offer appropriate and repeated reassurance to the patient, as required.
- Communicate clearly and concisely; give repeated verbal reminders of the day, time, location, and identity of key individuals, such as members of the treatment team and relatives.
- Provide a clock, calendar, and chart with the day's schedule, all in clear view.
- Have familiar objects from the patient's home in the room
- Ensure consistency in staff (for example a key nurse)
- Use television or radio for relaxation and to help the patient maintain contact with the outside world.
- Involve family and caregivers to encourage feelings of security and orientation.
- Provide family with a copy of RCPsych information leaflet on delirium.

Providing an unambiguous environment

- Simplify care area by removing unnecessary objects; allow adequate space between beds.
- Consider using single rooms to aid rest and avoid extremes of sensory experience.
- Avoid using medical jargon in patient's presence because it may encourage paranoia.
- Ensure that lighting is adequate; provide a 40-60 W night light to reduce misperceptions.
- Control sources of excess noise (such as staff, equipment, visitors).
- Keep room temperature between 21.1°C to 23.8°C.

Maintaining competence

- Identify and correct sensory impairments; ensure patients have their glasses, hearing aid, dentures. Consider whether an interpreter is needed.
- Encourage self care and participation in treatment (for example, have patient give feedback on pain).
- Arrange treatments to allow maximum periods of uninterrupted sleep.
- Maintain activity levels: ambulatory patients should walk three times each day; non-ambulatory patients should undergo a full range of movements for 15 minutes three times each day.

Post delirium counselling:

Delirium can be an unpleasant and frightening experience for patients and their families. Clear explanation reassurance and support should be offered to families and to the patient either during lucid periods of delirium or once they have recovered. After recovery, provide the patient with the RCPsych information leaflet on delirium.

Pharmacological treatment of delirium

- In many cases identification of delirium, discussion and reassurance of the patient and relatives and treatment of underlying organic problems will make it unnecessary to prescribe specific treatment for the symptoms of delirium.
- If pharmacological treatment is required, the aim is to normalize the sleep-wake cycle, reduce psychotic symptoms and control agitation/aggression. Haloperidol is the best researched and most commonly used antipsychotic drug for treating delirium. Small doses are usually sufficient and oral doses as small as 0.5 mgs nocte or bd may suffice.
- In more severe cases, intramuscular or intravenous administration of haloperidol may be required. The usual starting dose is 0.5-2.5 mgs haloperidol im or iv.
- Following intramuscular or intravenous administration, the patient should be reviewed every 20-30 minutes. If the patient remains unmanageable but has not had any adverse affects, double the dose and continue monitoring. Continue this cycle until the patient is settled. The aim of administering medication should be to help the patient settle, not to lower their level of consciousness.
- Upper limits on doses of haloperidol have not been clearly established. However, the risk of extra pyramidal side effects is dose related and doses should be kept as low as possible. Total doses in a 24 hour period are unlikely to exceed 20mgs (and in practice, doses over 5-7 mgs daily are rarely required).
- Patients with delirium who should not be treated with haloperidol include those with delirium tremens (because haloperidol lowers the fit threshold for fits), those with Parkinson's and those with Lewy body dementia (because of the risk of extra-pyramidal side effects). In these patients, treat with benzodiazepines.
- Olanzapine (2.5-5mgs orally per day) can be used as an alternative. Be aware that olanzapine has been associated with increased risk of stroke in older patients with dementia.
- 0.5-1mgs of lorazepam may be administered orally, intravenously or intramuscularly bd (maximum qds) and may be beneficial in allowing a lower dose of antipsychotics to be used.
- Medication for delirium needs to be titrated to effect, maintained until delirium is no longer present and then slowly reduced and stopped.
- Monitor respiratory function and level of sedation carefully. Consider administering flumazenil if there is evidence of significant lorazepam toxicity.

Appendix 4 Types of dementia

Alzheimers dementia

Common early symptoms in AD include memory impairment, disorientation and personality change. The five A's of AD have been summarised as amnesia, aphasia, apraxia, agnosia and associated Symptoms. The associated symptoms of Behavioural and Psychological Symptoms of Dementia (BPSD) are depression and/or elation, delusions and paranoid ideas, hallucinations and misidentification, aggression and wandering, hoarding, sexual disinhibition and eating disturbances.

Vascular Dementia (VaD)

May be difficult to distinguish from AD and the two often occur together. The figures for AD and VaD include mixed cases. In its pure form VaD is thought to be more likely to be associated with hypertension and other vascular disease and neurological symptoms. It may also be more acute in onset with better preservation of personality and insight, the last factor sometimes leading to more distress in the patient.

Lewy Body type dementia (DLB)

Is less common than Alzheimer's or Vascular dementia, it may be of special importance because its association with movement disorders may lead to falls and spinal cord injury. Furthermore patients with this form of dementia are particularly sensitive to antipsychotic medication and need to be identified early. Appropriate psychiatric opinion should therefore be available and be made use of.

Characteristic symptoms of DLB include prominent attention, executive + visuospatial symptoms with less marked memory impairment. Fluctuating cognition and recurrent visual hallucinations may be observed. Spontaneous features of Parkinsonism and repeated falls and syncope and transient unexplained loss of consciousness are not uncommon. There may be severe autonomic dysfunction.

Appendix 5

Mental Capacity Act 2005, Brief overview for staff at RNOH

The Mental Capacity Act provides the legal framework for acting and making decisions on behalf of individuals who lack mental capacity to make the decision for themselves.

Key Principles:

- Capacity is presumed (over 16) unless it can be established that capacity is lacking.
- Assessment of capacity must not be made solely on basis of age, appearance or unjustified assumptions.
- “All practical steps” must be made to facilitate understanding.
- Focus is on the specific decision to be made.
- Unwise decisions do not necessarily imply incapacity.
- Acts done or decisions made for incapacitated patient must be “in best interests” and the least restrictive option available to achieve purpose.

Lack of capacity:

Diagnostic test

Patient has an impairment of, or disturbance in functioning of, the mind or brain. Impairment may be temporary or permanent.

AND

Functional test

Patient is unable to make the decision for himself because of that impairment/disturbance.

Test of capacity:

Patient must be able to:

1. Understand the information relevant to the decision (as presented appropriately and using the most effective form of communication for that person).
2. Use or weigh up the information as part of the decision making process.
3. Retain that information (long enough to make an effective decision)
4. Be able to communicate the decision (all practical steps to facilitate this should be made).

Best Interests:

Checklist:

- Consider whether patient will regain capacity in future. (Take steps to restore capacity)
- Use “all practical means” to involve the patient to the maximum extent.
- Consider (as far as reasonably ascertainable – emergency may rule this out) past and present wishes, relevant beliefs, values and feelings of patient. **N.B. Patient may have made an advanced decision to refuse specified medical treatment or life sustaining treatment.**
- Reasons for departing from patient’s preferences must be recorded in writing.
- If the issue concerns life sustaining treatment, determination re ‘best interests’ must not be motivated by desire to bring about death e.g. “he would be better off dead”.
- If practicable, take into account views of anyone named by patient e.g. carer or significant other, patient’s attorney (appointed in a registered lasting power of attorney), or court appointed deputy.
- Can act be done in a less restrictive way?
- All relevant circumstances taken into account.

Who can be the decision maker for an incapacitated adult?

- For most day to day decisions: The person’s usual carer.
- For decisions involving medical treatment:
 - Doctor or healthcare staff responsible for carrying out the treatment with consideration to the ‘best interest’ checklist (above)
 - If lasting power of attorney made or court deputy appointed:
 - The attorney or deputy.
 - The IMCA (independent mental capacity advisor) if one allocated.

Patients lacking capacity and without family or close friends to advocate on their behalf may require the involvement of an IMCA or the court of protection. Trust solicitors may be able to advise.

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Research is required to further understand, and optimise the management of older people with spinal cord injury.



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