

## ACUTE GRIEF WITH DELIRIUM IN AN ELDERLY: HOLISTIC CARE

SB Khoo FRACGP, Penang Adventist Hospital. (Khoo Siew Beng)

**Address for correspondence:** Dr Khoo Siew Beng, Family Physician, Penang Adventist Hospital, No 465, Jalan Burma, 10350 Penang. Tel: 604-2227 200, Email: [khoosiewbeng@pah.com.my](mailto:khoosiewbeng@pah.com.my)

### ABSTRACT

Delirium in the elderly is a challenging and under-recognized problem in the community. Early detection and management improves outcomes and quality of life for the elders with delirium at home.<sup>1</sup> Family physicians (FP) play a key role in the assessments, early identification, and management of delirium and in the support and education of patients and their family caregivers.<sup>1</sup> Clinical analysis of this case illustrates the bio-psychosocial spiritual model of approach to management of delirium in an elderly patient in the home setting.

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### INTRODUCTION

Delirium affects 14-56% of elderly patients admitted in the hospitals.<sup>2</sup> Generally, patients with delirium in the community are not as frail as those in the hospital. Recent-onset delirium in the community is mainly associated with old age, dementia, infections, and medications that can be successfully treated in the primary care setting.<sup>3</sup>

Family Medicine advocates minimal tests to rule in diagnosis; not a routine battery of tests to rule out diagnosis. Principles of good clinical assessments, prioritisation, use of time as diagnostic and therapeutic tool, consideration of environmental and psychosocial influence, weighing risks versus benefits of investigations and pharmacological treatment, and respecting the wish of patient and family carers are of paramount importance.

This clinical case analysis highlights the importance of bio-psychosocial spiritual model of care in dealing with delirium in an elderly patient at home. It also illustrates the application of facts from textbooks to clinical practice on a personal individual case basis.

### CASE HISTORY

Mr A is an 82-year-old man with hyperlipidaemia, hypertension and diabetes mellitus (DM). He was diagnosed with thromboembolic stroke 12 months earlier. He is conscious and alert but with resultant mild dysarthria, left hemiparesis and right upper motor neuron facial nerve palsy. He does not have problem swallowing semi-solid food and is able to walk with support and supervision. He has been partially dependent on the care of his 75-year-old wife (until three weeks ago) with the help of an

Indonesian maid. Mr and Mrs A lived together in a medium cost apartment on the ground floor in Penang. Both of them are devout Buddhists from young. They have a son who is working as an engineer and who is currently living in Sarawak with his family. He embraced the Christian faith during his college days in Singapore.

Three weeks ago, Mrs A, who had hypertension, ischaemic heart disease and congestive cardiac failure for years, suddenly collapsed while taking a bath. She died before she could be taken to the hospital. After the funeral, it was decided that Mr A and the Indonesian maid should move over to Sarawak to stay with his only son and his family.

Since his wife passed away, Mr A has been having difficulty in sleeping at night. He has not been eating well and is rather quiet and withdrawn. He developed low grade fever for the past two days associated with mild cough and running nose. He was seen by a general practitioner who prescribed for him paracetamol, diphenhydramine cough mixture and midazolam 7.5 mg on PRN basis. Mr A is currently taking lovastatin 20 mg ON, metformin SR 800 mg daily, aspirin (cardiprin) 100 mg daily and perindopril 4 mg OM for his chronic illnesses.

For the past two days, Mr A seems to be restless, irritable and is behaving abnormally. He thinks he is still in his old apartment in Penang and has persistently demanded that his wife must take him out for his usual "evening walk" and to take him to the police station to make a report. He claims that someone had broken into his room the previous night and stole his wallet though there was no sign of a break in and nothing has gone missing.

Mr A's son requested you to come to the house to have a look at his father.

## CLINICAL FINDINGS BASED ON YOUR ASSESSMENTS ON MR A

During lucid intervals, Mr A expressed the painful loss of his wife, to whom he was very close for the past 50 years. He has much concerns and anxiety over his future on whether he could come back to his hometown in Penang. He worries whether his son, being a Christian, would be able to carry out Buddhist rites for him when he dies and whether his body could be transported back to Penang to be buried next to his wife in the reserved burial plot. But at other times especially in the evening, he does not remember where he is and what day it is. He keeps saying he is "muddled up in his head"; he finds it hard to concentrate on anything; everything is a "blur"; he is afraid of "losing control" of himself.

There was no history of a fall or any evidence to suggest possible head injury. There was no history of intellectual impairment or behavioural changes suggestive of dementia in the past.

Clinical assessment showed a low grade fever of 38°C, mild dehydration, bladder distension and no bowel movement for the past three days although there was no faecal impaction felt per rectum. There was no sign of pallor; blood pressure (BP) was normal; lungs were clinically clear; no heart murmur or cardiac arrhythmia; post stroke neurological status remained the same as before with no signs of recent neurological deficits.

## CLINICAL CASE ANALYSIS

### CLINICAL DIAGNOSIS

Delirium or acute confusion is a syndrome caused by physiologic alteration that temporarily impairs the autonomic nervous system. It develops over a short period (hours or days) and is clinically characterised by disturbances in attention, memory and perception. There is often one or more identified underlying causes.<sup>4</sup> Delirium is a non-specific sign of illness in a vulnerable group of patients. Similar to pain or fever, it may be caused by a simple treatable condition or signal a potentially life-threatening problem. It is reversible once the underlying condition resolves.<sup>4</sup>

Idiopathic confusion occurs when the patient loses a sense of pattern, meaning, or continuity in life. Potential triggers include losing a loved one, sleep interruptions, and hospitalisation. Most patients with idiopathic confusion respond well to reorientation and techniques that help them link the past to the present.<sup>4</sup>

From the medical history, Mr A is diagnosed to have both acute and idiopathic confusion. He showed memory deficit and disorientation; he had misperceptions that his wife was alive and that they were still living in Penang. He also experienced delusion that someone had broken into his room to steal his wallet. He showed mixed hypoactive behaviour of quietness and withdrawal during the day and hyperactive irritability with insistence on making

a police report in the evenings. There were lucid periods interspersed with confused episodes.<sup>4</sup> His confusion was of acute onset with close links to recent bereavement, immense psychosocial and environmental changes, multiple medical problems, and poly-pharmacy. Diagnosis of depression has to be considered and assessed too. Mr A did not have past history of chronic psychotic disorder or any indication of dementia.

### CLINICAL ASSESSMENTS

The diagnosis of delirium rests solely on clinical skills; no diagnostic test exists.<sup>5</sup> Obtaining a good medical history from a family member or carer on the recent cognitive changes of Mr A is the key to recognising delirium and identifying the complex psychosocial issues and medical problems that may contribute to the delirium of Mr A.

Table 1 summarises the appropriate questions and areas to cover in the medical history. Special attention should be given to assessment of physical, psychological and social impacts on Mr A brought about by the recent demise of his wife. Elderly people may be especially vulnerable when they lose a spouse because it means losing a lifetime of shared experiences. In Mr A's situation, the severe emotional shock was compounded by the fact that his wife's death was sudden and unexpected; they used to have a good close marital relationship; Mr A is disabled with stroke and was dependent on his wife as the main carer; and the demise of his wife necessitated major social readjustments for Mr A.

Dying is a natural and inevitable part of living. Elderly patients, having led a long life, are more open and accepting to discussions on death and dying. Open ended questions can be used to explore Mr A's feelings towards bereavement of his wife and issues confronting his own death. Cultural competence and communication skills of the physician will enable him to recognise the need to explore Mr A's anxiety, worries and preferences with regard to specific cultural and religious issues in the present circumstances.

Table 2 consists of a list of clinical findings suggestive of presence of medical problems that the family physician should be on the lookout for.

### CONTRIBUTING FACTORS

A unifying approach is to regard delirium as a clinical syndrome resulting from an interconnection of several underlying causes (risk factors such as old age, dementia, chronic illnesses, stroke) and precipitating factors (bereavement, dehydration, constipation, infection, drugs).<sup>5</sup>

Likely potential causes and factors contributing to Mr A's delirium are summarised in Table 3. Perhaps the most important contributing factor is personal grief experience that Mr A is going through at present.

**Table 1: Medical history**

<b>MEDICAL HISTORY</b>	
<b>AREAS TO EXPLORE</b>	<b>QUESTIONS TO ASK</b>
1. Main presenting complaint	Details of delirium – onset/presenting features of change of behaviour, perceptions, orientation, presence of delusion and hallucination
2. Details of other recent complaints	Onset and duration of fever/cough/associated symptoms Current specific treatment Possible side effects of cough mixture – difficulty in micturition/constipation/drowsiness/blurring of vision
3. Details of chronic illnesses and other past medical problems	Hypertension/DM/hyperlipidaemia Duration/progress/latest BP and blood test results/current treatment Past history of dementia/complications of chronic illnesses
4. Grief reactions	Assess physical/social/psychological impact of bereavement on patient Marital relationship with wife before she passed away
5. Depression	Assessment for presence of depression Distinguish between clinical depression and grief reaction due to bereavement
6. Social and environmental changes	Family support/usual lifestyle/eating habit/sleeping habit Impact of current environmental and psychosocial changes on patient Relationship with son's family
7. Religious/cultural/financial/legal issues	Any problems imposed by difference in religion between Mr A and son's family? Future plan with regard to legal matters/medical interventions/religious rites/ anxiety and fear of death and dying/burial sites or cremation
8. Systemic review	Visual and hearing deficit Recent neurological deficits Assessment for pneumonia/urinary tract infection (UTI)/cardiac problems/central nervous system (CNS) infection and tumours/head injury
9. Functional assessment	Mobility Physical assessment of activities of daily living Mental assessment
10. Environmental assessment	Recent history of falls Potential environmental risks for elderly falls
11. Current medication	Alcohol history/over the counter drugs/traditional medication/current prescription drugs
12. Perception and insight of patient in his own words	What does he think is wrong with him? How does he feel about his problems? How can others help him?

**Table 2: Clinical examination**

<b>PHYSICAL EXAMINATION</b>	<b>CLINICAL CUES TO LOOK FOR:</b>
<b>PHYSICAL CONDITIONS TO CONSIDER:</b>	
1. Difficulty in micturition	Distended bladder/prostatic hypertrophy
2. Constipation	Abdominal faecal mass/impacted faeces in the rectum
3. Dehydration	Low BP/sunken eyes/loss of skin turgor
4. Anaemia/Hypotensive shock	Bleeding tendency/pallor/low BP/tachycardia
5. Pneumonia	Increasing fever and cough/lung crepitations and rhonchi
6. Urinary tract infection	High fever and rigor/dysuria/hesitancy/foul smelling cloudy urine/haematuria/lumbar pain and tenderness
7. Acute myocardial infarct	Chest pain/hypotension/tachycardia/arrhythmia
8. Congestive cardiac failure	Dyspnoea/orthopnoea/ankle oedema/basal lung crepitations/hepatomegaly
9. TIA/stroke/head injury	Recent onset or worsening of concurrent neurological deficits/impaired consciousness/seizures
10. CNS infection	High fever/change in conscious level/neck stiffness/vomiting/headache/purpuric rash
<b>MENTAL STATE EXAMINATION</b>	
11. Confusion Assessment Method (CAM) <sup>20</sup>	
12. Folstein Mini Mental State Examination (MMSE) <sup>21</sup>	Deficits in orientation, attention, memory, language, and visuo-construction abilities
13. Delirium Index (DI) <sup>7</sup>	

**Table 3: Summary of factors contributing to delirium of Mr A**

POTENTIAL FACTORS	INDICATORS
1. Acute grief reaction	Wife just passed away three weeks earlier Second phase acute grief process
2. Depression	Clinical presentation of insomnia/loss of appetite/withdrawn Precipitating factors of grief/chronic illnesses/stroke/physical disability and immobility/change in social circumstances
3. Adverse effects of drugs	On midazolam (benzodiazepines)/cough mixture (anticholinergic)
4. Common infection URTI/UTI	Fever, cough and running nose/post stroke neurogenic bladder
5. Urinary retention	Anticholinergic effects of cough mixture/prostatic hypertrophy
6. Constipation	Drug side effects/limited mobility/poor oral intake
7. Social changes	Loss of wife as main caregiver/environmental changes/religious and cultural issues
8. Hypo or hyperglycaemia	Diabetes mellitus/poor oral intake/stress of infection and depression
9. Electrolyte imbalance	Poor oral intake/side effect of perindopril (hyperkalaemia)
10. CNS problems	High cardiovascular risk factors/past history of stroke

Table 4 lists down the possible reactions of Mr A as part of his way of handling the stress and anxiety of his loss.<sup>6</sup> Grief experience impacts all aspects of the being of an individual. Manifestations listed are more intensified when there has been a sudden unanticipated death. There is no timetable for grieving; various emotional and behavioural grief reactions are presented in an unpredictable and haphazard manner, an experience that the patient would describe as an “emotional roller coaster”. Patient may feel sad and depressed at one moment, and peace and contentment at the next moment.<sup>6</sup>

**Table 4: Personal impact of grief<sup>6</sup>**

PERSONAL IMPACT OF GRIEF	
Physical reactions	Change in appetite – overeating/under-eating Change in sleep pattern – insomnia/hypersomnolence Somatising symptoms – headache/dyspepsia/hyperpnoea/palpitation/exaggeration of skin allergy, diabetes, hypertension
Behavioural reactions	Passive and withdrawn Irritability and aggressive behaviour Hyperactivity Self-doubts
Cognitive reactions	Reduced attention span Loss of concentration Loss of self-esteem and confidence Indecisiveness
Emotional reactions	Self-blame/guilt/resentment Denial/anger/bargaining/depression/acceptance Fear/anxiety/paranoia/sadness Helplessness/hopelessness/frustrations/desperation
Spiritual/ Philosophical reactions	Challenge to one’s religious belief Anger towards God

## INVESTIGATIONS

Decisions on what laboratory and radiology tests to be done are based on the following critical analysis:

- o Is the test necessary?
- o What am I looking for?
- o What is the likelihood of patient having this medical condition that we want to test for?
- o The cost, convenience and availability of the test; is it a simple or complicated procedure, invasive or non-invasive, does it require hospitalisation?
- o Is there any treatment or favourable outcome that can be achieved after obtaining a positive result?

At the first consultation, random blood sugar level can easily be assessed with a home glucometer as Mr A is diabetic and is currently on oral hypoglycaemic drug. Dipstick urine analysis is a quick way to screen for UTI. If there is positive finding coupled with presence of clinical signs and symptoms, urine sample could be sent to the laboratory for urine culture and sensitivity (C&S).

Daily observations and feedbacks from family members on clinical progress of Mr A are necessary for constant review of management plan. Further tests could be ordered if there is no clinical improvement, if these tests have not been done recently or if there are fresh cues to suggest the need to do them. Blood and urine samples could easily be taken at home (such as urine C&S, full blood count, calcium, electrolytes, thyroid profile, renal and liver function tests) and sent to a private laboratory.

Persistent or worsening fever, respiratory symptoms and development of lung crepitations may suggest presence of pneumonia, of which a chest X-ray would be necessary. Mr A will have to be mobilised to the hospital to have the chest X-ray done. Electrocardiogram (ECG) can be carried out in the clinic or at home if there is chest pain or arrhythmia to suggest cardiac problems.

Although many patients with delirium have an underlying dementia and structural brain lesions (previous stroke), brain imaging, using computered tomography (CT) scan or magnetic resonance imaging (MRI) has been shown to be unhelpful on a routine

basis in identifying the cause of delirium and should only be reserved for those patients in whom an intracranial lesion is suspected. This might include patients with focal neurological signs, confusion after a fall or head injury, and evidence of raised intracranial pressure.<sup>7</sup>

Overall, the routine use of neuroimaging in delirium is not recommended, because the overall diagnostic yield is low, and the findings from neuroimaging change the management of patients in less than 10% of cases.<sup>8</sup>

## MANAGEMENT

### Non-pharmacological treatment

Mr A's delirium requires a highly detailed and expert analysis of all the factors which might be disrupting the brain function. Ten steps in the management plan are listed in Table 5.

**Table 5: 10 steps management plan for delirium**

10 STEP MANAGEMENT PLAN FOR DELIRIUM
1. Risk assessments for injury to self, family members and carers
2. Reassurance, explanation and education for patient and family
3. General physiological requirements – adequate oxygenation, hydration, nutrition, sleep
4. Provide a conducive and unambiguous environment
5. Provide support and orientation for patient
6. Maintain competence of patient with good communication skills
7. Identification and correction of underlying causes/precipitating factors – adverse drug effects, fever, constipation, urinary obstruction, bereavement, psychosocial problems, cultural and religious issues
8. Further investigations to exclude more serious medical problems
9. Pharmacological treatment
10. Referrals

Mr A does not seem to be highly aggressive or pose a danger to others or to self, as to require immediate emergency treatment or hospitalisation. Reassurance and educating Mr A and his family members on delirium and its associated underlying medical and psychosocial conditions are important. Unless there is reason to believe that Mr A has experienced permanent loss of cognitive function, the patient and family members should be reassured that the symptoms are temporary and should resolve.<sup>9</sup>

While the underlying causes and precipitating factors are identified and treated, top priority must be given to general measures to ensure optimal physiological requirements, to provide a conducive environment, support and orientation for Mr A and good communication skills to maintain Mr A's competence. Table 6 summarizes the various ways and means of achieving this essential non-pharmacological supportive care.

**Table 6: Tips for carers at home<sup>4,13,14</sup>**

TIPS FOR CARERS AT HOME <sup>4,13,14</sup>
<b>General physiological requirements</b>
1. Monitor his food and fluid intake and help to maintain his normal elimination patterns.
2. Maintenance and restoration of normal sleep patterns.
3. Adequate ventilation and oxygenation (if there is presence of difficulty in breathing and cyanosis).
<b>Providing support and orientation</b>
4. Repeated orientation (place clocks, calendars, newspapers, familiar objects in the room).
5. Provide familiarity. Encourage patient to keep meaningful possessions as anchors to reality.
6. Repeated reassurance, ideally by the same person.
7. Good communication skills with appropriate verbal and body language. Avoid using medical jargon in patient's presence because it may encourage paranoia. Invite him to talk about his background to maintain links with his past.
8. Strategies in dealing with confused speech of patient. Tactfully disagree if topic is not sensitive/change the subject/acknowledge the feelings expressed but ignore the contents.
9. Gentle approach from the front. Explain whatever is going to be done for him and ask for feedback to gauge his comprehension.
10. Sensory aids where necessary (glasses, hearing aids).
11. Comforting rituals such as maintaining his daily evening walk, a glass of milk before going to bed, etc.
12. Use television or radio for relaxation and to help the patient maintain contact with the outside world.
13. Involve family and caregivers to encourage feelings of security and orientation.
<b>Providing conducive environment</b>
14. Consider using single rooms to aid rest and avoid extremes of sensory experience.
15. Calm environment with good lighting to reduce misperceptions; minimal distractions with controlled sources of excess noise.
16. Keep room temperature to a comfortable level between 22°C to 26°C.
17. Assess safety of environment. Reduce risk of falling by providing commodes at bedside. Remove floor wiring that may cause him to trip. Remove glare of TV screen.
<b>Maintaining competence</b>
18. Avoidance of physical, emotional or chemical restraints that may frighten him, erode his sense of control and heighten his confusion.
19. Keep things simple. Don't ask him to make difficult decisions and avoid repetitive questioning. This can be frightening and humiliating and may increase his confusion.
20. Wrist restraints are doubly frightening for patient. Having his hands tied represents the ultimate loss of control. Devise alternative measures such as placing mattress on the floor to avoid falls.
21. Maintain activity levels and encourage self-care.
22. By asking the right questions and finding out what one can do, one can develop appropriate assessments and interventions to help patient break through the clouds of his confusion.

People experience and express grief in different ways, often shaped by culture<sup>6</sup> but in all places and cultures, the grieving person benefits from the support of others.<sup>10</sup> The experience of grief and mourning process involves many changes in the life of

Mr A. It is a period of adaptation and transitions in all aspects of his life. It is his whole personhood that faces this forced change. Grief reconciliation depends on many other factors confronting the individual in his life. A bio-psychosocial spiritual model of care is essential to address and support Mr A in the management of his grief and delirium.<sup>6</sup>

John Welshons in his book entitled "Awakening from Grief" states the principles of grief counselling: "So there is no way to apply systems, rules or emotional maps. Our job is to be a presence, rather than a saviour; a companion, rather than a leader; a friend, rather than a teacher".<sup>11</sup>

The "Companioning Model of Bereavement" caregiving developed by Dr Alan D Wolfelt is one where bereavement carers help the bereaved to integrate life losses by being present to them and observing-companioning. The helper:<sup>12</sup>

- o Listens in a supportive manner to their concern
- o Help them to understand the wide range of reactions to trauma such as shock, disbelief, frustrations, anger, denial, confusion, sadness, etc.
- o Reassurance that their emotional reactions are natural, normal and to be expected
- o Assist them to prioritize and organise day to day and recovery tasks
- o Assist them to draw on their own strengths and develop healthy coping mechanisms
- o Sensitively and caringly support individuals to grieve their losses in their own unique ways

Family physician acts as a facilitator to encourage discussions between Mr A and his son's family with regard to legal, religious and cultural issues. The strategic approach of going along with Mr A's personal wish and preference will render him some peace of mind and comfort.

#### *Pharmacological treatment*

Poly-pharmacy and reactions to medications such as narcotics, benzodiazepines, cardiovascular agents and anticholinergic agents are major causes of confusion in elderly patients. Mr A's recent prescription for cough mixture (anticholinergic) and midazolam (benzodiazepine) should be withheld. Drugs for his chronic illnesses that he has been taking for years without any problem could be continued. Without the anticholinergic side effects of drugs, Mr A's difficulty in micturition and constipation could improve as well. On-the-spot catheterisation could provide immediate relief of urinary obstruction and at the same time to allow collection of urine sample for office dipstick examination. Dulcolax suppository may be preferred to oral laxative to clear the bowels. Fever can be controlled symptomatically with paracetamol. Use of antibiotics may be considered if there is underlying respiratory or UTI that requires one.

**All sedatives can cause delirium and should be avoided if at all possible.** Sedative compounds can improve agitation but may worsen cognitive impairment and is associated with a greater incidence of falls.<sup>13</sup> Use of sedatives are indicated mainly for carrying out essential investigations (such as CT scan and MRI) and treatment, for preventing harm and injury to patient and carers and for relieving distress in highly agitated or hallucinating patients.<sup>14</sup>

Haloperidol is the drug of choice as it is the most widely used agent with documented efficacy to decrease agitation associated with delirium.<sup>14,15</sup> It is preferable to use one drug only, to start with the lowest possible dose and increase if necessary to a maximum of 2 mg daily orally or intramuscular (IM) injection of 2 mg every six hourly (oral and IM doses are not equivalent). Medication has to be reviewed daily and to be discontinued as soon as possible. If a second line treatment is needed for severe distress and agitation, a short acting benzodiazepines rather than diazepam is preferred.<sup>7,15</sup>

There is evidence that Risperidone and Olanzapine increase risk of cerebrovascular events in elderly patients with history of dementia or previous history of stroke or transient ischaemic attack (TIA). These drugs should not be started as first line treatment for such patients. Use of Risperidone for acute psychotic conditions in elderly patients with dementia should be limited to short term and should be under specialist advice. Both drugs should not be used to treat behavioural symptoms of dementia.<sup>7</sup>

Mr A does not require any antipsychotic drug. Occasionally if agitation is worse and unmanageable at night, perhaps a small nocturnal dose of haloperidol may help to reduce the agitation and induce some sleep. Early identification and prompt treatment of the underlying causes may reduce the severity and duration of his delirium.<sup>7</sup>

#### **When do we use medication to treat grief reaction?**

Normal grief is neither an illness nor a pathological condition: it is a normal response to losing of a loved one. However, what is normal and how our grief is expressed can vary considerably from one griever to the next. Everyone grieves differently according to their age, gender personality, culture, value system, past experiences with loss, and available support.

There is consensus belief that medication ought to be used sparingly and focused on giving relief from anxiety or insomnia as opposed to providing relief from depressive symptoms.<sup>16</sup> As a general rule, normal grief does not warrant the use of antidepressants. While medication may relieve some of the symptoms of grief, it cannot treat the cause, which is the loss itself. Furthermore, by numbing the pain that must be worked through eventually, antidepressants delay the mourning process.<sup>17</sup>

However, if feelings of hopelessness blossom into irrational despair and are accompanied by other depressive features, a diagnosis of clinical depression may result along with the need for pharmacological intervention.<sup>16</sup>

### The differences between grief and depression

Though grief and clinical depression share many symptoms, there are ways to tell the differences. Grief involves a wide variety of emotions and a mix of good and bad days. With depression, the feelings of emptiness and despair are constant, severe and persistent.<sup>17</sup>

Other symptoms indicative of depression includes intense guilt and feelings of hopelessness and worthlessness, suicidal thoughts, slow speech and body movements, inability to function at home or at work and seeing or hearing things that are not there.<sup>17</sup>

### Referrals

Indications for referrals to hospitals are mainly for investigations and treatment of serious medical problems that could not be carried out at home and if there is severe agitation and potential danger of patient harming himself or his family members.

### PROGNOSIS

The course of delirium can last from several hours to several months. Delirium due to certain specific conditions (such as hypoglycaemia, infection, drug toxicity) typically resolves rapidly with treatment. However, there may be increased risk of cognitive and functional decline in frail and sick patients who develop delirium during hospitalisation.<sup>18</sup>

Full recovery should not be ruled out for Mr A merely because he has had a stroke before, but it does require a consistent, supportive, stimulating environment and a coordinated approach between the family members and medical professionals.<sup>19</sup>

### REFERENCES

1. Bond SM. Delirium at home: strategies for home health clinicians. *Home Healthc Nurse*. 2009;27(1):24-34; quiz 35-6.
2. Cole MG. Delirium in elderly patients. *Am J Geriatr Psychiatry*. 2004;12(1):7-21.
3. Lixouriotis C, Peritogiannis V. Delirium in the primary care setting. *Psychiatry Clin Neurosci*. 2011;65(1):102-4.
4. Life & Health Library. Hall, Geri Richards. Acute confusion in the elderly; 1996. [Online]
5. Young J, Inouye SK. Delirium in older people. *BMJ*. 2007;334(7598):842-6.
6. Wheeler-Roy S, Amyot BA. A field manual. Grief counselling resource guide. New York State Office of Mental Health. 2004. [Online]
7. Clinical guidelines for the care and treatment of older patients with psychiatric co-morbidity in a general hospital setting (Revised 2005). Isle of Wight, NHS. [Online]
8. Hirao K, Ohnishi T, Matsuda H, et al. Functional interactions between entorhinal cortex and posterior cingulate cortex at the very early stage of Alzheimer's disease using brain perfusion single-photon emission computed tomography. *Nucl Med Commun*. 2006;27(2):151-6.
9. Gleason OC. Delirium. *Am Fam Physician*. 2003;67(5):1027-34.
10. Nadeau JW. Families making sense of death. Thousand Oaks, CA: Sage; 1998;10(4):289.
11. Welshons JE. Preparing for our own death. Awakening from grief. Finding the way back to joy. Manawao, Hawaii: Inner Ocean Publishing; 2003. p. 159.
12. Wolfet AD. "Companioning vs. treating: beyond the medical model of bereavement caregiving - Part 3". The Forum Newsletter. Association of Death Education and Counselling; 1998.
13. Meagher DJ. Delirium: optimising management. *BMJ*. 2001;322(7279):144-9.
14. Purchas M. Guidelines for the diagnosis and management of acute confusion (delirium) in the elderly. Royal Cornwall Hospitals, NHS Trust. 2005. [Online]
15. Breitbart W, Marotta R, Platt MM, et al. A double-blind trial of haloperidol, chlorpromazine, and lorazepam in the treatment of delirium in hospitalized AIDS patients. *Am J Psychiatry*. 1996;153(2):231-7.
16. William JW. Grief counselling and grief therapy. A handbook for the mental health practitioner. 4<sup>th</sup> ed. New York: Springer Publishing; 2009. p. 108-42.
17. Coping with grief and loss. [helpguide.org](http://helpguide.org) [Online]
18. Inouye SK, Bogardus ST Jr, Charpentier PA, et al. A multicomponent intervention to prevent delirium in hospitalized older patients. *N Engl J Med*. 1999;340(9):669-76.
19. Bayne JR. Management of confusion in elderly persons. *Can Med Assoc J*. 1978;118(2):139-41.
20. Inouye SK, van Dyck CH, Alessi CA, et al. Clarifying confusion: the confusion assessment method. A new method for detection of delirium. *Ann Intern Med*. 1990;113(12):941-8.
21. Folstein MF, Folstein SE, McHugh PR. "Mini-mental state". A practical method for grading the cognitive state of patients for the clinician. *J Psychiatr Res*. 1975;12(3):189-98.