INVITED ARTICLE

ACUTE CONFUSION IN THE ELDERLY

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ABSTRACT

Acute confusion is common in the elderly ill patient. Its presence should provoke an urgent search for its cause. The key to management of acute confusion is in the removal or reversal of the factors responsible together with good nursing care.

Keywords : Common,reversible, good nursing care, cautious sedation

SINGAPORE MED J 1991; Vol 32: 79-80

INTRODUCTION

Confusion is a common non-specific presentation of illness in the elderly. It is not a diagnosis but a symptom requiring an active and urgent search for its cause. Confusion, falls, immobility and incontinence, together constitute the 'Giants of Geriatric Medicine'[1].

I INCIDENCE AND DESCRIPTION

Acute confusion is especially common in the elderly ill patient. Those whose cerebral circulation has been compromised by atherosclerosis or those with dementia are susceptible to acute confusion. The incidence of acute confusion is difficult to measure with any certainty in the community. This is due to its often vague and difficult presentation. However, several hospital studies show incidence varying from 10% to about 50% in elderly patients admitted to acute medical wards[2].

Acute confusion manifests with a global impairment of cognitive function. Its characteristic features include:

- Decrease and fluctuating level of consciousness and awareness with lucid episodes.
- Disorientation in time, space and person.
- A short history of presentation.
- Worsening of symptoms at night.
- Impairment of memory, attention span and concentration.
- Disturbed thought process with difficulty in comprehension and reasoning ability.
- Change in sleep-wake cycle with episodes of drowsiness, sleeplessness to hyperexcitation state.

The result of the above is a confused elderly with varying levels of consciousness who is disoriented. He has difficulty with concentration and in interpreting information and stimuli from his environment. As a result, he is usually restless, agitated and unable to achieve sufficient rest or sleep. Delusions and hallucinations occur from altered thought processess and misinterpretation of events. Paranoid behaviour is another frequent presentation. During all this confusion, the elderly is often acutely unwell.

The key to diagnosing acute confusion is the short time frame with the elderly patient being well prior to it. The often 'knee jerk reflex response' of diagnosing dementia is the greatest harm that can befall an acutely confused elderly person. Acute confusion in the elderly differs from that in the young in the following :

- It is more easily provoked especially when there is an underlying dementia. Simple stress such as change of environment, dehydration or even constipation may result in acute confusion.
- The episode of confusion tends to last longer.
- It is less dramatic in its presentation.
- It carries an adverse prognostic outcome. Studies by Roth[3] (1955) and Blessed[4] (1982) show an increase in mortality rate in elderly with acute confusion.

II CAUSES OF ACUTE CONFUSION

Acute confusion may be viewed as a 'toxic' process. Any factor which interferes with the brain's activity ie. its blood supply, nutrient, water and electrolyte balance and enzyme activity results in acute confusion.

The more common causes include the following :

Infection - This is commonly from chest infection, pneumonia, urinary tract infection and cellulitis.

Causes of cerebral hypoxia - These include :

i. Inadequate blood supply to brain, related to heart failure, irregular heart rhythm, atherosclerosis, stroke and anaemia.

ii. Inadequate oxygenation of blood due mainly to pneumonia, emphysema, chronic bronchitis and asthma.

Metabolic disorder - Such as renal and liver failure.

Dehydration and electrolyte imbalance - This results from inadequate intake as in depression, and acute illness or from excessive loss as in diarrhoea and vomitting.

Endocrine disorder - This includes diabetes mellitus (hyper and hypoglycaemia) and thyroid diseases as common causes.

Malnutrition - Where deficiency in mainly the Vitamin B group ie. thiamine, riboflavin and nicotine acid are common causes.

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Intracranial disorder - This includes infection, stroke, subdural haematoma, space occupying lesion and epilepsy.

Trauma and severe pain - Fractures, herpes zoster, acute glaucoma, acute retention of urine and even chronic constipation may sometimes cause confusion.

Drugs - Drugs are unfortunately a common and iatrogenic cause of confusion. The commonly implicated drugs include :

Sedatives and hypnotic
Anti-depressant drugs
Anti-Parkinsonian drugs
Steroids
Diuretics
Digoxin
Non-steroidal drugs
Anti-histamines
Alcohol

III MANAGEMENT OF ACUTE CONFUSION

(a) *Acute Diagnosis and Treatment*

It is important to differentiate acute confusion from dementia. Dementia is an untreatable disease while acute confusion is treatable. The presence of a short history with clouding of consciousness and a fluctuating level of confusion and presence of physical illness often provide sufficient ground for differential from dementia.

Although there are often multiple factors contributing to a confusion state, there is often an important precipitating cause. The unravelling of this requires patience and skill. A detailed and exhaustive history often from the patient's carers, friends and neighbours is needed. Physical examination has to be meticulous and may require to be done in parts to prevent overstressing the elderly patient. A mental assessment is a crucial part of this examination.

Apart from the basic investigation ie. full blood count, urea and electrolyte, blood glucose. ECG and CXR, the other investigations are done based on the findings of the initial assessment.

Treatment aim is to reverse and remove the factors causing confusion. The range of treatment is as extensive as the list of causes of acute confusion.

(b) *Good nursing measures and other general measures*

This is absolutely essential. It would include attention to the following :

i. Nutrition and adequate hydration —

An appetising well balanced diet with adequate nutrients especially the Vitamin B group is important. It is important to ensure an adequate fluid intake ie. 2 litres/day.

ii. Attention to urinary and bowel function —

A proper record and attention to the urine and bowel function. Urinary retention and constipation are common and distressing conditions which would only worsen the confusional state. They should be resolved immediately.

iii. Prevention of pressure sore and contracture —

In the often immobile and severely ill patient, this requires the strictest of good nursing practice, good skin care regimen, regular turning of drowsy patients and frequent reviews. Pressure sores occur with great speed in the severely ill elderly and only an active and comprehensive nursing care can prevent this.

iv. Proper environment —

Good lighting is essential. Inadequate light gives rise to shadows which may be misinterpreted by the patient. A single room away from a busy medical ward with its noise and frequent movement of people is appropriate.

v. Gentle reassuring nursing

Nursing should be carried out in a gentle and reassuring manner. Patients require constant reassurance and a regular nurse who is familiar is ideal. The use of patient's name and frequent orientation of the patient has been shown to be beneficial[5].

The value of good nursing care cannot be underestimated. It is often the crucial factor in patient's response to treatment.

(c) *Use of sedative drugs*

Sedatives are in themselves a course of confusion and if used inappropriately may worsen the confusion. They are not part of first line management.

The indication for medication is when the patient is so restless that he gets insufficient rest and thus become exhausted. Sedation in this condition is beneficial and may even be life saving. Use of sedation has to be at the right dose, the minimum required for an adequate response for the shortest duration of usage. The commonly used drugs include thioridazine (melleril) a mild tranquillizer, haloperidol, chlormethiazine (heminevrin), chloral hydrate and the short acting benzodiazepines such as triazolam and temazepan.

SUMMARY

Approach to Acute Confusion

(1) History and Physical Examination
- short time frame
- evidence of confusion and cause
- search for causes

(2) Review of list of causes
- Infection
- Cerebral hypoxia
- Metabolic and endocrine disorders
- Dehydration and electrolyte imbalance
- Malnutrition
- Intracranial disorder
- Trauma and severe pain
- Drugs

(3) Management
- Acute diagnosis
- Removal of cause and treatment
- Good nursing practice
- Reality Orientation
- Rehabilitation

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