



# ORGANIC MENTAL DISORDERS IN ELDERLY

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## INTRODUCTION

It is assumed that all psychological and behavioral processes, whether normal or abnormal, are a result of normal or deranged brain function. Only disorders with a known organic cause are called organic mental disorders. Thus, organic mental disorders are behavioral or psychological disorders associated with transient or permanent brain dysfunction and include only those mental and behavioral disorders that are due to demonstrable cerebral disease or disorder, either primary (primary brain pathology) or secondary (brain dysfunction due to systemic diseases). The use of term organic here does not imply that other psychiatric disorders are 'non-organic' in the sense of having no biological basis. It simply means that the organic mental disorders have a demonstrable and independently diagnosable cerebral disease or disorder, unlike other psychiatric disorders that do not at present. In the present context, the term "organic" means simply that the syndrome so classified can be attributed to an independently diagnosable cerebral or systemic disease or disorder. The term "symptomatic" is used for those organic mental disorders in which cerebral involvement is secondary to a systemic extra cerebral disease or disorder (ICD-10).

The presence of following features requires a high index of suspicion for an organic mental disorder (or what is loosely called as organicity):

1. First episode.
2. Sudden onset.
3. Older age of onset.
4. History of drug and/or alcohol use disorder.
5. Concurrent medical or neurological illness.
6. Neurological symptoms or signs, such as seizures, impairment of consciousness, head injury, sensory or motor disturbance.
7. Presence of confusion, disorientation, memory impairment or soft neurological signs.

8. Prominent visual or other non-auditory (e.g. olfactory, gustatory or tactile) hallucinations. These disorders can be broadly sub categorized into the following categories:

1. Delirium,
2. Dementia,
3. Organic amnesic syndrome
4. Other organic mental disorders.

## DELIRIUM

Delirium is the commonest organic mental disorder seen in clinical practice. Five to fifteen percent of all patients in medical and surgical inpatient units are estimated to develop delirium at some time in their lives. This percentage is higher in postoperative patients. Delirium is the most appropriate substitute for a variety of names used in the past such as acute confusional states, acute brain syndrome, acute organic reaction, toxic psychosis, and metabolic (and other acute) encephalopathies.

## Clinical Features

Delirium is characterized by the following features:

1. A relatively acute onset,
2. Clouding of consciousness, characterized by a decreased awareness of surroundings and a decreased ability to respond to environmental stimuli
3. Disorientation (most commonly in time, then in place and usually later in person), associated with a decreased attention span and distractibility.
4. Marked perceptual disturbances such as illusions, misinterpretations, and hallucinations also occur.
5. There is often a disturbance of sleep-wake cycle; most commonly, insomnia at night with daytime drowsiness.
6. There is also an impairment of registration and retention of new memories.



### **Aetiology**

The list of possible causes of delirium is virtually endless. Any factor which disturbs the metabolism of brain sufficiently can cause delirium. The etiology of delirium demonstrates a threshold phenomenon, with a combination of factors adding up to cross a threshold for causing delirium, which appears to be different for each individual. One of the important causes is post-cardiac surgery delirium. Some other causes may include:

1. Cardiac arrest
2. Drugs(both ingestion and withdrawal can cause delirium)
3. Nutritional Deficiencies
4. Epilepsy, head injury, Intracranial infections and Stroke

### **Management**

1. In cases where a cause is not obvious (or other contributory causes are suspected), a battery of investigations should be done which can include complete blood count, urinalysis etc.
2. Identification of the cause and its immediate correction.
3. Symptomatic measures: As many patients are agitated, emergency psychiatric treatment may be needed.
4. Supportive medical and nursing care.

## **DEMENTIA**

Dementia is a syndrome due to disease of the brain, usually of a chronic or progressive nature, in which there is disturbance of multiple higher cortical functions, including memory, thinking, orientation, comprehension, calculation, learning capacity, language, and judgement. It is a chronic organic mental disorder, characterized by the following main clinical features:

1. Impairment of intellectual functions,
2. Impairment of memory (predominantly of recent memory, especially in early stages),
3. Deterioration of personality with lack of personal care.

Impairment of all these functions occurs globally, causing interference with day-to-day activities and interpersonal relationships. There is impairment of judgement and impulse control, and also impairment of abstract thinking. There is however usually no impairment of consciousness (unlike in delirium).

### **Aetiology**

A large number of conditions can cause dementia. However, a majority of cases are due to a few common causes such as Alzheimer's disease and multi-infarct dementia.

1. Alzheimer's Dementia is the commonest cause of dementia, seen in about 70% of all cases of dementia in USA. It is more commonly seen in women.
2. Multi-infarct dementia is the second commonest cause of dementia, seen in 10-15% of all cases, though some studies indicate that multi-infarct dementia is probably far more common in India. It is also one of the important treatable causes of dementia.
3. Hypothyroid Dementia has been considered one of the most important treatable and reversible causes of dementia, second only to toxic dementias. Although it accounts for less than 1% of dementias, hypothyroidism should be suspected in every patient of dementia.
4. About 50-70% of patients suffering from AIDS exhibit a triad of cognitive, behavioural and motoric deficits of subcortical dementia type and this is known as the AIDS-dementia complex (ADC).
5. Lewy body dementia is now believed to be the second most common cause of the degenerative dementias, accounting for about 4% of all dementias.

### **Management**

1. The diagnostic tests are of great importance in finding the cause, or to exclude all other causes before diagnosing Alzheimer's dementia.
2. Early treatment can prevent further deterioration of dementia.
3. Environmental manipulation and focus on coping skills to reduce stress in day-to-day activities. Treatment of medical complications, if any.
4. Care of food and hygiene. Supportive care for the patient and family/caregivers.

## **ORGANIC AMNESTIC SYNDROME**

A syndrome of prominent impairment of recent and remote memory. While immediate recall is preserved, the ability to learn new material is markedly reduced and this results in anterograde amnesia and disorientation in time. Retrograde amnesia of varying intensity is also present but its extent may lessen over time if the underlying lesion or pathological process has a tendency to recover. Confabulation may be a marked feature but is not invariably present. Perception and other cognitive functions, including the intellect, are usually intact and provide a background against which the memory disturbance appears as particularly striking. The prognosis depends on the course of the



underlying lesion (which typically affects the hypothalamic-diencephalic system or the hippocampal region); almost complete recovery is, in principle, possible. Organic amnesic syndrome is characterized by the following clinical features:

1. Impairment of memory due to an underlying organic cause,
2. No severe disturbance of consciousness and attention (unlike delirium)
3. No global disturbance of intellectual function, abstract thinking and personality (unlike dementia).

The impairment of memory is characterized by a severe impairment of recent memory or short-term memory (inability to learn new material). This is associated with impaired remote memory or long-term memory (inability to recall previously learned material). There is however no impairment of immediate memory (i.e. immediate retention and recall). Although recent memory is severely disturbed, very remote events are better remembered, especially in the initial stages. Recent memory impairment also leads to disorientation in time and place.

#### **Aetiology**

1. Thiamine deficiency: The most common cause of organic amnesic syndrome is chronic alcohol dependence (alcoholism). It is also called as the Wernicke- Korsakoff syndrome.
2. Head trauma, Surgical procedure (e.g. bilateral temporal lobectomy), Hypoxia, Posterior cerebral artery stroke (bilateral).

#### **Management**

1. Treatment of the underlying cause, e.g. thiamine (high doses) in Wernicke-Korsakoff syndrome. However usually the treatment is of not much help, except in prevention of further deterioration and the prognosis is often poor.
2. Supportive care for general condition and treatment of the associated medical illness.

#### **OTHER ORGANIC MENTAL DISORDERS**

This group includes miscellaneous mental disorders which are causally related to brain dysfunction due to primary cerebral disease, systemic disease (secondary), or toxic substances. These conditions have in common clinical features that do not by themselves allow a presumptive diagnosis of an organic mental disorder, such as dementia or delirium. Rather, the clinical manifestations resemble, or are identical with, those of disorders not regarded as "organic" in the specific sense restricted to this block of the classification. Their inclusion here is based on the

hypothesis that they are directly caused by cerebral disease or dysfunction rather than resulting from either a fortuitous association with such disease or dysfunction, or a psychological reaction to its symptoms, such as schizophrenia-like disorders associated with longstanding epilepsy.

#### **ORGANIC HALLUCINOSIS**

According to ICD-10, presence of persistent or recurrent hallucinations due to an underlying organic cause is required for the diagnosis of organic hallucinosis, in addition to the general guide lines for the diagnosis of other organic mental disorders, described earlier. It is important to rule out any major disturbance of consciousness, intelligence, memory, mood or thought. These hallucinations can occur in any sensory modality but are usually visual (most common) or auditory in nature. In many cases, they depend on the underlying cause. These hallucinations can range from very simple and unformed, to very complex and well-organised. Usually the patients realize that the hallucinations are not real but sometimes there may be a delusional elaboration of hallucinations.

#### **Aetiology**

1. Drugs: Hallucinogens, cocaine, cannabis etc.
2. Alcohol: In alcoholic hallucinosis, auditory hallucinations are usually more common.
3. Sensory deprivation.
4. 'Release' hallucinations due to sensory pathway disease, e.g. bilateral cataracts, otosclerosis, optic neuritis.
5. Migraine, Epilepsy: Complex partial seizure, Intracranial space occupying lesions, Temporal arteritis, Brain stem lesions (peduncular hallucinosis).

#### **Management**

1. Treatment of the underlying cause, if treatable.
2. Symptomatic treatment with a low dose of an antipsychotic medication (such as Haloperidol, Risperidone and Olanzapine) may be needed.

#### **ORGANIC CATATONIC DISORDER**

It is a disorder of diminished (stupor) or increased (excitement) psychomotor activity associated with catatonic symptoms. The extremes of psychomotor disturbance may alternate. It is not known whether the full range of catatonic disturbances described in schizophrenia occurs in such organic states, nor has it been conclusively determined whether an organic catatonic state may occur in clear consciousness or whether it is always a manifestation of delirium, with subsequent partial or total amnesia.



Encephalitis and carbon monoxide poisoning are presumed to be associated with this syndrome more often than other organic causes.

### **Aetiology**

1. Lack of neurotransmitters
2. Sudden reduction of Dopamine and GABA
3. Disorders like Neurodevelopmental, Psychotic, Bipolar and Depressive

### **ORGANIC DELUSIONAL [SCHIZOPHRENIA-LIKE] DISORDER**

A disorder in which persistent or recurrent delusions dominate the clinical picture. The delusions may be accompanied by hallucinations but are not confined to their content. Features suggestive of schizophrenia, such as bizarre delusions, hallucinations, or thought disorder, may also be present.

### **CONCLUSION**

These disorders generally affect the geriatric population of the society due to the impairment in the cognitive abilities. These disorders can be cured with the help of medications (antipsychotics), psychotherapy, and self-help groups that can enable a person to cope up with them. Professional help should be immediately taken at the onset of a disorder. A psychological technique that is very helpful in treating these organic mental disorders is Cognitive Behavioral Therapy (CBT) in which people learn to change their thoughts to change their resulting feelings. The person, for example, learns to focus more on the positive aspects of becoming older than the negative aspects. CBT is the most common form of treatment.

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