

ALCOHOL-INDUCED DEMENTIA

Alcohol-induced dementia is the third or fourth most common type of intellectual loss in older persons. Alcoholic dementia is produced by long term heavy drinking that directly damages brain cells or causes health problems that produce brain damage. Alcohol abuse is common in older persons. Eight percent of elders have a serious drinking problem. Sixty percent of elders drink and some elders (5-10%) are binge drinkers. Medicare spends more money on alcohol related problems than the treatment of heart attacks, i.e., myocardial infarctions. Alcohol related dementia is under-diagnosed because primary care doctors fail to recognize alcoholism in majority, (i.e., 60%) of older patients. Families adopt the “let granny have her drinks” attitude that prolongs heavy drinking amongst older persons.

The diagnosis of alcohol related dementia requires a careful clinical history and physical examination. The DSM-IV states that patients with alcoholic induced dementia must have sufficient cognitive deficits to meet criteria for dementia and a history of substance abuse based on clinical history, physical examination, or laboratory studies. The clinical manifestations of alcohol induced dementia resemble those of other types of dementia and this diagnosis can not be confirmed with a simple clinical history. Patients develop memory problems, language impairment, and inability to perform complex motor tasks, like dressing. Patients cannot be diagnosed with dementia while they are in withdrawal or experiencing serious medical complications resulting from the substance abused, e.g., liver failure, GI bleeds.

Psychiatric problems are common in patients with alcohol induce dementia. These patients develop apathy, irritability, and resistiveness that result from damage to the frontal lobes.

Korsakoff's psychosis (KP) is frequently confused with alcoholic dementia. KP is not a dementia but rather a pure amnesia. The KP patient has severely impaired short-term recall but his patient has excellent long-term memory and other intellectual functions. Patients with KP should be treated with thiamin but this amnesia is usually permanent.

Alcohol abuse will worsen intellectual and psychiatric symptoms in patients with other types of dementia. Alzheimer's or vascular dementia patients should not be allowed to drink except for ceremonial situations such as weddings, etc.

The physical examination of a patient with alcohol induce dementia may reveal evidence of neurological damage from heavy drinking. Heavy alcohol abuse damages the nerves in arms and legs, i.e., peripheral neuropathy as well as the cerebellum that controls coordination i.e., cerebellar ataxia. These patients frequently have problems with sensation in their extremities and may demonstrate unsteadiness on their feet. Alcohol also damages the heart and liver. These individuals may have abnormalities of liver studies and heart damage termed "alcoholic cardiomyopathy". This heart damage may produce additional brain complications such as strokes or hypo perfusion, i.e., low blood flow to the brain.

Brain imaging or other clinical studies are not helpful in distinguishing alcoholic dementia from other diseases. Neuropsychological testing can sometimes help clarify this diagnosis.

Psychiatric manifestations may proceed intellectual loss in some patients. Alcohol induced dementia can produce any type of psychiatric problem associated with

dementia to include psychosis, depression anxiety, and personality changes. Patients with alcoholic dementia often develop apathy related to frontal lobe damage that may mimic depression. These individuals become irritable or resistive when caregivers attempt to assist with basic care. These individuals also demonstrate impulsive hostile behavior that requires medication.

The brain changes associated with alcohol are very non-specific. The lack of specific brain pathology has caused alcohol-induced dementia to be under-recognized as a cause of intellectual loss. Alcohol damages neurons, i.e., brain cells, throughout the brain; however, the frontal lobes and cerebellum are particularly prone to injury.

Treatment of alcoholic dementia requires sobriety, vitamin replacement, correction of medical problems, and management of behavior problems. The brain damage produced by alcohol may be arrested by cessation of drinking. Prolonged periods of sobriety for patients with alcohol induced dementia may result in slow small improvements of intellectual function. Unlike Alzheimer's disease where patients lose two or three points on their mini mental per year, alcoholic dementia patients may regain 0.5 points per year with prolonged sobriety. Many patients have nutritional deficiencies that produce thiamin or folic acid deficiency state. Patients with alcoholic related medical problems need careful medical attention to assure that heart or liver disease does not contribute to confusion.

Patients with alcohol induced dementia are at high risk for falls because of damage to nerves and cerebellum. Alcoholic patients are at high risks for subdural hematomas, i.e., collections of blood between the brain tissue and outer covering produced by trauma. Anytime an alcoholic patient sustains a fall and subsequent

alteration of function or conscienceness the patient should be examined for new neurological findings and the treatment team should consider the performance of a CAT scan to exclude a subdural hematoma. New drugs for Alzheimer's disease are not shown beneficial for patients with alcohol induced dementia.

Psychiatric problems produced by alcohol induced dementia are treated with appropriate psychotropic medications. Antidepressants or antipsychotics are more effective for alcohol-induced psychiatric problems. Apathy rarely responds to antidepressants or other psychotropic medications. Impulsive or hostile behavior can be managed with anti-convulsants, anti-psychotics, or Lithium. Benzodiazepines can sometimes be use to manage irritability or anxiety.

Alcohol induced dementia is a common form of intellectual loss. Patients with alcoholic dementia frequently manifest behavioral as well as intellectual symptoms. Alcoholic dementia differs from Alzheimer's disease because many patients have discrete neurological abnormalities. Patients with alcohol induced dementia may improve over time if they maintain continuous sobriety.

Although some patients stabilize or improve with time, other patients demonstrate progressive cognitive loss. The cause of this ongoing intellectual decline is not understood.