(A Health Awareness Initiative)

NEURO NEWSLINE

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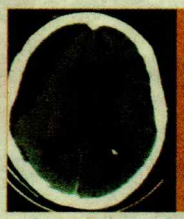
DEMENTIA - THE REVERSIBLE CAUSES

Dementia is a term that describes a wide range of symptoms associated with a decline in memory severe enough to reduce a person's ability to perform daily activities. Alzheimer's disease accounts for 60 to 80 percent of all cases. The second most common type is the overall cognitive decline following a 'Stroke', and this is termed as the vascular dementia. There are quite a few medically reversible dementias which occur secondary to vitamin deficiencies and thyroid disorders.

Memory deficit is the cardinal feature of dementia, however, this definition requires impairment in one more domain namely language, perception, visuospatial function, calculation, judgement, abstraction and problem-solving skills. This disorder affects 3 - 11% of adults > 65 years age, with a greater presence among institutionalised residents ! The risk factors includes advancing age, family history of dementia and the presence of apolipoprotein E-4 allele.

There are a substantial subset of patients who have underlying reversible causes for dementia. A few of them do get misdiagnosed as depressive illness or ignored and attributed to advancing age ! Chronic subdural haematomas, normal pressure hydrocephalus, frontal lobe tumours (low grade astrocytoma), gliomatosis cerebri, metastatic brain tumours, lymphoma (brain) and benign cranial tumours like basifrontal Meningioma can lead to memory and cognitive decline. In these patients, dementia may be the first warning symptom without any other feature of raised intracranial pressure. Cases related to head trauma, encephalomenigitis (brain fever), stroke (occlusive & hemorrhagic) also present with a general decline in cognition and are correctable to a great extent (long duration of treatment required) if presented to the clinician early !



" An example of a Chronic Subdural haematoma presenting with cognitive decline of recent onset "

DIAGNOSIS

Anyone who has a recent onset of progressive decline in memory coupled with slowing of activities in daily living, though old need to be investigated. Thyroid function tests and screening of serum levels for vitamins can be done along with basic blood tests to rule out other causes of medically treatable dementias. Biochemical markers and EEGs are used to determine dementias due to ageing of brain cells like that of Alzheimer's. MRI brain coupled with MR - angiography will be helpful to diagnose all other causes of dementia. At times the patient may need a dynamic CSF flow study using MRI if a disorder such as normal pressure hydrocephalus is suspected.

TREATMENT

In dementia due to the degeneration of brain cells medical management with Donepezil and Memantine can help to control the decline in memory. Appropriate replacement therapies are required for thyroid disorders and vitamin deficiencies where drugs can reverse cognitive decline and maintains patient well being. A programmable shunt (ventriculo peritoneal) surgery is useful in cases of Normal pressure hydrocephalus. Simple cranial surgeries using burr holes can drain the subdural haematomas of chronic origin. Micro neurosurgical procedures will be of use to excise tumours (benign) where the symptoms of dementia are completely reversible. Malignant tumours of the brain will need radiation and chemotherapy in addition to surgery, though reversal of symptoms are temporary. Dementias with an underlying cause must be aggressively treated irrespective of an advanced age, as they are medically and surgically correctable in most cases !