

## Reversible Dementia Fact Sheet

### What is Reversible Dementia?

Reversible dementias are conditions that cause symptoms associated with behavioral or cognitive changes that can be resolved once the primary etiology is treated. There are many causes of reversible dementia that can lead to impaired neurocognitive function in the elderly population.<sup>1</sup>

### Prevalence of Reversible Dementia

It is noted that the prevalence of reversible dementia is highly variable with a range between 8% to 40% which can be due to the confusion of the definition of reversible dementia. All in all, about 12% of those with dementia symptoms have treatable and reversible causes.<sup>1</sup> The prevalence of reversible dementia in those over the age of 65 years old is 5%.<sup>1</sup>

### Types of Reversible Dementia(s)

When it is thought that a patient may have dementia, use of the mnemonic DEMENTIA may be useful to determine if it is reversible. **D**rugs (anticholinergic, steroid, analgesic, sedative, antipsychotic), **E**motion (depression), **M**etabolic (hypothyroid, heavy metals, hypoglycemia, Cushing's/Addison's disease, electrolyte imbalance, Vitamin B12 and E/folate deficiency, thiamine and niacin deficiency), **E**yes, ears, and sleep (sleep apnea, insomnia, sensory isolation), **N**ormal pressure hydrocephalus, **T**umor (subdural hematoma, intracranial abscess), **I**nfection (syphilis/AIDS, UTI, Whipple's disease, Lyme disease, sarcoidosis, meningitis), and **A**trial Fibrillation and **A**lcoholism.<sup>2,3,4,5</sup>

Drugs

Emotion

Metabolic

Eyes, Ears, and Sleep

Normal Pressure Hydrocephalus

Tumors

Infection

Atrial Fibrillation/Alcoholism

### Symptoms of Reversible Dementia

Symptoms may vary widely depending on the type of reversible dementia the patient may have. Clinicians should be suspicious of reversible dementia if: there is an early age of onset, rapid and unexplained decline in function, prominent fluctuations in symptoms, and if a patient has medical condition(s) that are known to cause reversible dementia.<sup>1</sup> The presence of these symptoms should lead to a referral to the patient's MD.

Other symptoms include: memory/behavioral changes, poor visual and verbal memory, difficulty concentrating, fatigue, vision loss, heart palpitations, urinary dysfunction, mobility impairments.<sup>4</sup>

### Diagnostic Testing/Imaging for Reversible Dementia

When reversible dementias are suspected, the following laboratory tests/imaging can be performed: urinalysis, complete blood cell count, serum electrolyte levels, liver/renal function tests, thyroid function tests, serum Vitamin B, serologic tests for syphilis, chest radiography, electrocardiography, brain imaging, electro-encephalogram, lumbar puncture, HIV screening, and auto antibody screening.<sup>1</sup>

### Physical Therapy Examination

It is imperative during physical therapy evaluation, to complete cognitive screening. Screening for dementia is quick and can help to identify symptoms that mimic dementia. Screening can include the Mini Mental State Exam or the Mini-Cog test and if screening does detect cognitive decline, additional evaluation is needed to determine the underlying cause. Completing a thorough subjective history with family/caregivers/patients can help to identify recent cognitive changes. Communicating these concerns and test results to the IDT team is imperative because early identification and diagnosis can significantly improve patient outcomes. Medication reconciliation should be completed to ensure there are no medication interactions or side effects of medications.<sup>4</sup>

### Acute Medical Management of Reversible Dementia

Once the cause of reversible dementia is identified, treatment with use of medications will help with the symptoms and help the patient recover. Regular aerobic exercise of 30 minutes a day combined with strength training has been shown to improve behavior, function, and reduce depression. Exercise has been shown to improve cognitive function in healthy adults and those with impaired cognition.<sup>3</sup>

### References

1. Chari D, Ali R, Gupta R. Reversible dementia in elderly: Really uncommon?. *J Geriatr Ment Health* 2015;2:30-7
2. Tripathi M, Vibha D. Reversible dementias. *Indian J Psychiatry*. 2009;51 Suppl 1(Suppl1):S52-S55.
3. Scott KR, Barrett AM. Dementia syndromes: evaluation and treatment. *Expert Rev Neurother*. 2007;7(4):407-422. doi:10.1586/14737175.7.4.407
4. Seven reversible causes of dementia in older adults. *American Nurse*. Published March 5, 2021. <https://www.myamericannurse.com/seven-reversible-causes-of-dementia-in-older-adults/>
5. Little MO. Reversible Dementias. *Clin Geriatr Med*. 2018;34(4):537-562. doi:10.1016/j.cger.2018.07.001