Management of Behavioral and Psychological symptoms of Dementia

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Cognitive Impairment is the hallmark of Dementia. Behavioral disturbances are universally experienced by persons with dementia throughout the course of the illness. Behavioral and Psychological symptoms of dementia (BPSD) causes a significant negative impact on quality of life , health care outcomes , caregiver stress and burden.

Behavioral and psychological symptoms of dementia(BPSD) is the collective term used to describe the group of non cognitive symptoms experienced in dementia. These can include psychosis, agitation and mood disorder and affects 50% - 80% of patients to varying degrees (Ashlen.P. et al) (Lyketsos CG).

Behavioral disturbances can often trigger hospitalization resulting in increased hospital length of stay (WancataJ.2003).

The various types of dementia are classified according to the different disease process affecting the brain. The most common cause of dementia is Alzheimer's Disease, accounting for around 60% of all cases. Vascular dementia and dementia with Lewy bodies are responsible for most other cases. Alzheimer's Disease and vascular dementia may co-exist and are difficult to separate clinically. Dementia is also encountered in about 30% - 70% of patients with Parkinson's Disease.

Vascular dementia is a consequence of ischemic or hemorrhagic damage of area of the brain involved in memory and cognition.

Alzheimer's disease and related dementias are among the most costly and distressing medical conditions for patients and their caregivers. (Hebert LE etal 2013).

Although dementia is often thought as a disease of memory, 97% of individuals with dementia experience one or more behavioral disturbance. (Steinberg M. et al 2014)

BPSD , the known neuropsychiatric symptoms occurs in clusters or syndromes identified as psychosis, depression , agitation, aggression, sleep disturbances and apathy. Socially and sexually inappropriate behaviors are seen. Agitation can be manifested as restlessness, arguing, disruptive vocalization and rejection of care. Aggression can include verbal insults such as shouting, physical aggression such as biting and hitting others and throwing objects. (Rose KC et al 2017).

BPSD is seen throughout the course of dementia, symptoms may occur intermittently or fluctuate greatly in severity. These behaviors are seen in all types of dementia but psychosis and visual hallucinations are more common in Lewy body dementia.

Disinhibition, apathy and social inappropriateness are more common in frontotemporal dementia. (Lyketsos CG et al 2002).

Many factors have been found to be associated with the development of BPSD. There are fundamental changes and neurodegeneration in the brain of persons with dementia in centres that control cognition and emotion. Breakdown in the brain circuitry caused by dementia can impact the ability of the persons with dementia to interact with others and their environment (Kales HC et al, Geda YE et al 2013). Undiagnosed medical issues can contribute to the development of behavioral disturbances. Medical issues, such as urinary tract infection, hypothyroidism, anemia, constipation and pneumonia can cause behavioral disturbances (Hodgson NA et al 2011). Changes in central nervous system activate medications, such as anticholinergic drugs, opioids can lead to behavioral disturbances . Inadequate assessment and treatment of pain can lead to BPSD (Geriach LB et al 2017).

Caregivers of patients with BPSD usually have high rates of depression and anxiety. Behavioral disturbances in patients are triggered or worsened when a caregiver is stressed or depressed (Smith M et al 2006).

Due to complexity and multiple causes of BPSD, a 'one size fits all treatment approach does not work. Individual need based treatment is needed. Atypical and Typical antipsychotics are used very carefully and not for prolonged period due to risk of adverse events.

First generation antipsychotics(FGAs) have been widely used for decades in behavioral disturbances associated with dementia. They are probably effective but because of extra pyramidal and other adverse effects are less well tolerated. Various reviews and trials support the efficacy of olanzapine, risperidone, quetiapine, aripiprazole and amisulpride. In second CATIE-AD study greater improvement was noted with olanzapine and risperidone on certain neuropsychiatric rating scales compared with placebo.

The FDA issued black box warnings for increased risk of mortality with use of atypical and typical antipsychotics in patients with dementia.

Donepazile, rivastigmine and galantamine may afford some benefits in reducing behavioral disturbances in dementia (Terao T et al 2003)

Non pharmacological treatments for BPSD can include behavioral, environmental and caregiver supportive interventions.

Behavioral interventions focused on the environment may include correcting over stimulation or under stimulation, addressing safety problems, increasing activity and structure and establishing routine.

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