Course ID: CMEC25

## Early symptoms and signs in cognitive decline in clinical practice

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Educational Objectives: To provide knowledge about early manifestations of the most common dementia disorders.

**Course description:** This teaching course aims at providing knowledge about early symptoms and signs in patients with the most common dementia disorders, i.e. Alzheimer's disease, fronto-temporal dementia, dementia with Lewy bodies, and vascular dementia. Knowledge about symptomatological assessment, with the focus on psychometric assessment, brain imaging and biochemical markers for the various dementia disorders will be provided.

Alzheimer's disease is a progressive, neurodegenerative disease. The general opinion among investigators is that, except for autosomally dominant genetic variants of Alzheimer's disease which only account for a few per cent of the Alzheimer patients, there are still no biological markers that can specifically contribute to the identification of Alzheimer's disease. However, own studies have demonstrated that the CSF-tau protein level is increased in patients with Alzheimer's disease in comparison with controls. The studies have also demonstrated that the CSF-b-amyloid1-42 level is reduced in the Alzheimer group.

Fronto-temporal dementia includes a group of primary degenerative dementia disorders that present with a predominant frontal-lobe syndrome. The clinical picture of fronto-temporal dementia is complex, and under-diagnosis, misdiagnosis and maltreatment have often been reported. Frontotemporal dementia may sometimes be difficult to distinguish from vascular dementia and Alzheimer's disease and most criteria for the diagnosis of Alzheimer's disease may also apply to fronto-temporal dementia.

Dementia with Lewy bodies is a recently described dementia entity. The disease shares several clinical and pathological characteristics with Parkinson's disease. In some studies dementia with Lewy bodies accounts for 15% to 20% of all autopsy-confirmed dementia's in old age. The relationships between dementia with Lewy bodies and Parkinson's disease and other dementia disorders, e.g. Alzheimer's disease, have not been fully resolved. The disease entity may, in any case, be useful to consider in terms of clinical features, responsiveness to treatment, and neuropathological features.

The view that multi-infarct dementia is the predominant, or even the only type of vascular dementia has proven wrong. Using various brain-imaging methods and other techniques, recent clinical research has revealed that there exist other forms of vascular dementia. One form that has recently been paid attention to is subcortical vascular dementia, which is characterised by an insidious course, emotional blunting, mental slowness, gait disturbances, multiple vascular lesions and small-vessel damage. Some data suggest that subcortical vascular dementia is the most common type of vascular dementia and

that it is common also in patients with late-onset Alzheimer's disease. Subcortical vascular dementia has even been suggested to be the link between Alzheimer's disease and vascular dementia.

Educational methods and course material: Case reports to illustrate some of the above issues will be presented. Handouts, reprints, and reference lists for further readings will be submitted. PowerPoint.

Target audience: Physicians (and also psychologists).

Course level: Basic training as a physician. Basic training as a psychologist.