DEMENTIA NEWSLETTER FOR PHYSICIANS

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In This Issue ...

Editorial Committee

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Resources for Physicians

Visit www.champlaindementia.org and go to the "Physicians" tab.

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Depression in Dementia

Dr. Amer M. Burhan, MBChB, FRCPC, Geriatric Neuropsychiatrist, RMHC-London and CAMH Centre, Assistant Professor (Psychiatry), University of Toronto

Key Points:

- **There is significant overlap between depression and dementia, making diagnosis challenging.**
- **Depression is associated with negative affect (e.g. loss of pleasure), distinguishing it from the apathy of dementia.**
- **Non-pharmacological interventions should be considered first, while antidepressants should be reserved for moderate to severe cases.**

At least half of patients with Alzheimer's dementia (AD) have significant depressive symptoms, and approximately 20% meet criteria for major depressive disorder (MDD).[1] Depression is common in other forms of dementia as well, especially vascular and mixed Alzheimer's/vascular dementias.[2] A prior history of clinical depression is a risk factor for developing dementia,[3] but depression may also be an early manifestation of dementia itself.[4]

The co-morbidity of depression and dementia can result in several negative consequences such as added subjective suffering, further functional decline, increased caregiver burden, greater health care utilization, and lower overall quality of life.[1,5]

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WEBINAR FOR FAMILY PHYSICIANS

Topic: Depression in Dementia

Presenter: Dr. Amer M. Burhan, MBChB, FRCPC, Geriatric Neuropsychiatritist, RMHC-London and CAMH Centre, Assistant Professor (Psychiatry), University of Toronto

Date/Time: Tuesday, September 25, 2012 from 12 to 1 p.m.

Register Now!

Complete the online registration form at http://www.surveymonkey.com/s/KNC9ZHF

Technical Requirements:

Visual Support — The presentation will be accessible via an internet connection. This connection can be any web-enabled laptop or desktop computer of your choice.

Audio Support — Audio support for the presentation will be provided through your telephone via a toll-free line.

You will receive a confirmation email 24-48 hours prior to the session. Thank you, we look forward to your participation!

Depression in Dementia (cont'd from page 1)

The underlying mechanism of depression in dementia remains unclear, but it is likely a combination of psychological reaction to cognitive loss, and structural changes in brain circuitry involved in mood regulation.[6,7]

There are several challenges in diagnosing depression in patients with dementia. Firstly, there is significant symptomatic overlap between the two illnesses. Loss of appetite and decreased interest can be due to depression, or it can be due to *apathy*, which results from structural degeneration of medial and ventral frontal circuits involved in motivation and reward.[8] Secondly, sleep changes are common in both depression and dementia. In trying to diagnose depression in dementia, clinicians should focus on negative affect (involving loss of pleasure or wishes to die), and diurnal variation of mood (morning being the worst) which indicate true depression. Specific diagnostic criteria for depression in dementia have been proposed, as have specific scales to evaluate these symptoms, such as the Cornell Scale for Depression in Dementia (CSDD).[9.10]

When significant depression is identified in patients with dementia, an individualized approach should be implemented, taking into account personal and environmental factors, cognitive and functional status, severity of symptoms, and safety concerns (such as suicidal ideation and low fluid/food intake behaviours). Identification of modifiable environmental factors like social isolation and chronic pain is important before considering specific medical treatment.

Several small clinical trials of antidepressants in the treatment of depression in AD have been reported. In 2007, a meta-analysis concluded that antidepressants are safe and efficacious in treating MDD in AD.[11] However, a recent large community-based, multi-centre, randomized/placebo-controlled controlled trial in patients with mild to moderate depression in AD failed to demonstrate benefit of Sertraline or Mirtazapine over placebo, with the added risk of adverse events with the antidepressants.[12] Therefore, clinicians should reserve antidepressants for moderate to severe depression cases, after environmental and supportive approaches are attempted first. In severe refractory depression in AD requiring hospitalization, antidepressants and electroconvulsive therapy (ECT) may be considered after careful risk-benefit assessment, and appropriate informed consent from the individual or appropriate substitute decision maker.[13]

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Vascular Dementia

Dr. D. A. Guzman, M.D., FRCPC, Neurologist, Memory Disorder Clinic, Elisabeth Bruyère Hospital

Key Points:

- **Vascular Dementia is dementia due to cerebrovascular disease.**
- **Prevention is important – Aggressive control of vascular risk factors and dietary/lifestyle enhancement.**
- **Cholinesterase inhibitors are not approved for use in Vascular Dementia, though clinical trials would indicate that a trial of these medications can be considered, especially in mixed Alzheimer's/ Vascular Dementia.**

While the concept of Vascular Dementia (VaD) remains in a state of flux, it consists essentially of cerebrovascular disease causing dementia. The NINDS-AIREN criteria for VaD require the presence of dementia (cognitive impairment in at least two cognitive domains causing loss of functional independence), the presence of ischemia on neuroimaging, and a probable link between the ischemia and the dementia (i.e. occurring close together in time).

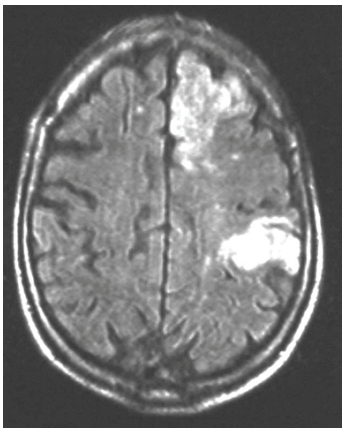
There are several sub-types of Vascular Dementia :

A. Multi-infarct Dementia (i.e. dementia due to multiple cortical +/- subcortical infarcts)
   - Multiple infarctions can be confirmed on neuroimaging

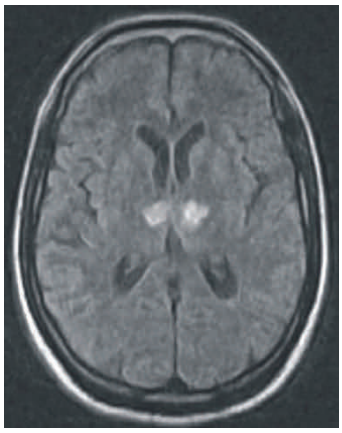
B. Dementia with strategic infarcts (e.g. thalamus, hippocampus, angular parietal gyrus)
   - Dementia often occurs with sudden onset, as a critical cognitive region of the brain is infarcted

C. Subcortical Ischemic Vascular Dementia (i.e. dementia with multiple basal ganglia and white matter lacunes and/or extensive periventricular white matter lesions)
   - This form of VaD is very difficult to diagnose with certainty, as diffuse ischemic changes in the brain are ubiquitous in the aging population. Such VaD may present with stepwise development of non-memory cognitive impairment, accompanied by gait or personality changes (i.e. quite distinct from the presentation of Alzheimer's disease dementia).

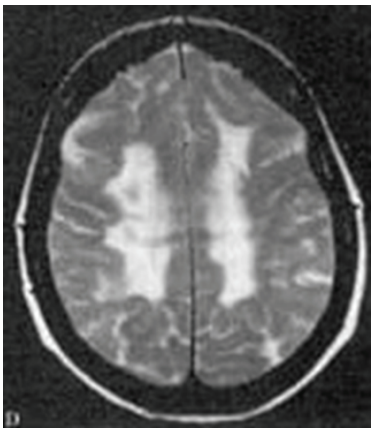
(Figure 1)



A. Multi-Infarct Dementia



B. Strategic-Infarct Dementia (e.g. Bilateral Thalami)



C. Subcortical Ischemic Vascular Dementia

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Vascular Dementia (cont'd from page 3)

INCIDENCE

Incidence of "pure" Vascular Dementia is actually quite low. In the "Nun Study" only 3 of 118 autopsies on demented individuals revealed changes diagnostic of "Vascular Dementia". Other autopsy studies have also shown low prevalence in more "typical" dementia populations – i.e. 2-10% of all dementia cases. On the other hand, clinically, It may be that many cases of "Alzheimer's disease Dementia" may well have a vascular component (i.e. Mixed Dementia).

MANAGEMENT

Vascular Dementia, like Alzheimer's disease Dementia, is amenable to preventive management. Control of vascular risk factors is critical – i.e. hypertension, diabetes, lipid abnormalities, smoking cessation, and diet/lifestyle enhancement. Other 'protective' factors can be promoted: increased education and cognitive stimulation, and increased protection from head injury. Recently, perhaps due to better vascular control, there has been a trend towards decline in the age-specific incidence of dementia in older adults.

CHOLINESTERASE INHIBITOR THERAPY IN VASCULAR DEMENTIA

There is no approved treatment for Vascular Dementia. However, clinical trials testing cholinesterase inhibitors (i.e. donepezil, rivastigmine, and galantamine) have been generally positive. Therefore, a trial of cholinesterase inhibitor in Vascular Dementia cases can be considered. As well, these agents can be used in mixed (AD/Vascular) dementia. As noted, the majority of demented "Alzheimer's disease" patients have a significant cerebrovascular ischemic component to their condition.

Other Resources for Family Physicians

- **Dementia Interview Guide (in Ontario)**
  Ontario Dementia Newsletter for Physicians
  Dr. Bill Dalziel, Regional Geriatric Program of Eastern Ontario
  www.champlaindementianetwork.org/en-resources.asp#PHYSICIANS - click on Dementia Newsletter for Physicians Vol. 1, No. 3, Fall 2011, page 1-4

- **Guide to Scheduling and Billing for Family Physicians (in Ontario)**
  Ontario Dementia Newsletter for Physicians
  Dr. Bill Dalziel, Regional Geriatric Program of Eastern Ontario
  www.champlaindementianetwork.org/en-resources.asp#PHYSICIANS - click on Dementia Newsletter for Physicians Vol. 1, No. 1, Fall 2010, page 1-2

- **Driving and Dementia Video (15 minutes)**
  Dr. Frank Molnar, Chief, Regional Geriatric Program of Eastern Ontario
  www.akeresourcecentre.org - go to the right hand side and click on Driving and Dementia e-module.