

DEMENTIA NEWSLETTER FOR PHYSICIANS

A Publication of the Ontario Dementia Network

In this issue

- When It's Not Alzheimer's
- Dr. Elizabeth Finger
- Neuropsychiatric symptoms associated with dementia
- Amber Knuff
- Maria Hussein
- Dallas Seitz

Editorial Committee

Dr. Andrew R. Frank
(Ottawa)
Dr. Bill Dalziel
(Ottawa)
Dr. Andrea Moser
(Muskoka)
Dr. Joanne Clark
(Sudbury)
Dr. Lisa Van Bussel
(London)
Dr. Patricia LePage
(Thunder Bay)

Editor

Dr. Andrew R. Frank
B.Sc.H. F.R.C.P.(C)
Cognitive and Behavioural
Neurologist,
Memory Disorder Clinic,
Elisabeth Bruyère Hospital,
Ottawa, Ontario

Resources for Physicians

Visit
www.champlainedementia.org
and go to "Physicians" tab

For more Information

Ontario Dementia Network
c/o Alzheimer Society
of Ottawa and
Renfrew County
Tel: 613-523-4004
Fax: 613-523-8522
Email: info@asorc.org

WHEN IT'S NOT ALZHEIMER'S: FRONTOTEMPORAL DEMENTIA

Dr. Elizabeth Finger, MD, Assistant Professor of Neurology, Western University



KEY POINTS:

- Frontotemporal Dementia (FTD) is an aggressive form of neurodegeneration affecting the personalities and language function of younger patients
- New treatments for FTD are entering clinical trials soon

Frontotemporal dementia (FTD) is a progressive, neurodegenerative disorder that most commonly strikes patients in the prime of life – their mid-50s to 60s. Yet, unlike Alzheimer's disease in which memory and cognition are affected early, these patients usually have intact memory and general cognition. Patients with FTD undergo progressive destruction of the frontal and/or temporal lobes of the brain, which can result in blunting of their emotions and their capacity to experience feelings. This includes the loss of empathy for others, even family members, as well as signs of impulsiveness, inappropriate or disinhibited social behaviours, and for some, extreme irritability and aggression. The loss of empathy is one of

Cont'd on page 2

WEBINAR FOR FAMILY PHYSICIANS

Topic: Approach to the Patient with Neuropsychiatric Symptoms Associated with Dementia

Presenter: Dallas Seitz, MD, FRCPC

Dept. of Psychiatry, Queen's University, Kingston, Ontario;
Providence Care, Kingston, Ontario

Date/Time: Wednesday, May 15, 2013 12 noon to 1pm

Link: <https://www.surveymonkey.com/s/ODNMAY2013>

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!



Register now



WHEN IT'S NOT ALZHEIMER'S: FRONTOTEMPORAL DEMENTIA

the most devastating aspects of the disease for families and caregivers – patients become cold, indifferent, and even callous toward the people they most loved and cherished, yet at the same time becoming entirely dependent on their family for care.

If the left frontal and temporal lobes are primarily affected, patients may exhibit difficulties with language and speech, called “aphasia”. Patients with left frontal degeneration have difficulty with word retrieval and pronunciation. Patients with left temporal lobe disease lose the meaning of words, and have increasing difficulty with language comprehension, a subtype of FTD called “semantic dementia”.

Because the symptoms of FTD can be subtle at first, particularly when they include changes in personality, decision-making, and judgment, the disease is often under-recognized. In addition, standard neuropsychological tests may not always detect the abnormalities. This is especially true in the early stages, when standard brain imaging techniques such as CT and MRI may also be normal. Thus, patients who present with early or subtle changes in social behavior, but no evident pattern on imaging, may go undiagnosed for years.

Despite difficulties in the diagnosis of FTD, recognition of the disease by neurologists and other health-care professionals is growing. Much research is underway to identify better diagnostic tests, such as new imaging methods, genetic analysis, and tests of proteins in blood and spinal fluid. Through such tests, the disease can be identified in its earlier stages, and in family members who may be at risk of developing the disease.

Most unfortunately, there are currently no treatments to slow or cure the disease, and no treatments approved specifically for the treatment of symptoms in FTD. At best, empirical treatment with SSRIs or cholinesterase inhibitors may be attempted. However, for the first time, clinical trials testing treatments specific to frontotemporal dementia are starting. In London Ontario, we are investigating the potential of a hormone, oxytocin, to boost empathy and positive social interactions in patients with FTD. As well, novel potential treatments which aim to block progression of FTD are being developed by pharmaceutical companies worldwide, and are expected to be available within clinical research trials in Ontario in 2013.

For more information on current frontotemporal dementia research opportunities in London Ontario, please contact the Cognitive Neurology and Alzheimer Disease Clinic at 519-646-6032. For further information and resources on frontotemporal dementia, please visit the website of the Association for Frontotemporal Degeneration, www.theaftd.org

APPROACH TO THE PATIENT WITH NEUROPSYCHIATRIC SYMPTOMS ASSOCIATED WITH DEMENTIA

Amber Knuff BA^{1,2}, Maria Hussein¹ MD FRCPC, Dallas Seitz^{1,3} MD FRCPC

¹Department of Psychiatry, Queen's University, Kingston, Ontario; ²Centre for Neuroscience Studies, Queen's University, Kingston, Ontario; ³Providence Care, Kingston, Ontario



Alzheimer's disease (AD) and related forms of dementia are becoming increasingly prevalent with the aging demographics of most developed countries.¹ Currently, there are over 500,000 older adults living with dementia in Canada¹ and approximately 80% of individuals with dementia display neuropsychiatric symptoms (NPS) at some point in their illness.² NPS are particularly challenging in long-term care (LTC) populations, where the reported prevalence of dementia is between 50-70%³⁻⁹, and over 80% of these individuals have NPS.^{3, 10-18}



APPROACH TO THE PATIENT WITH NEUROPSYCHIATRIC SYMPTOMS ASSOCIATED WITH DEMENTIA

Neuropsychiatric symptoms of dementia, also known as behavioural and psychological symptoms of dementia (BPSD), have been defined as “signs and symptoms of disturbed perception, thought content, mood, or behaviour that frequently occur in patients with dementia”.¹⁹ Such symptoms can be generally classified into five symptom clusters: psychosis, sleep disturbance, depression, apathy, and agitation.²⁰

Agitation has been defined as “purposeless motor or vocal activity commonly observed in individuals with dementia that are not driven by unmet needs”.²¹ One commonly used rating scale for NPS is the Cohen-Mansfield Agitation Inventory, which rates a variety of agitated behaviours, including verbal (e.g. yelling, repetitive vocalizations), non-aggressive physical (e.g. restlessness, pacing), and aggressive physical agitations.²¹ Another commonly utilized rating scale, the Neuropsychiatric Inventory (NPI)²², captures broader symptomatology and clusters symptoms into psychotic symptoms (e.g. hallucinations, delusions), hyperactivity (e.g. agitation, irritability, euphoria, disinhibition), and disturbances in mood (e.g. anxiety, depression, apathy, disturbances in sleep and eating).^{20, 23}

A comprehensive assessment of NPS is multifaceted. First and foremost is a thorough history, identifying the target symptoms, so that management can be tailored accordingly. Collateral information from caregivers is an essential component, especially as the patient’s cognitive impairment progresses.²⁴ Caregivers can provide a longitudinal account of the progression of NPS, and identify possible triggers. Additionally, the caregiver interview provides insight into caregiver burden, as NPS frequently contribute to caregiver distress, depression, increased care costs, and risk of nursing home placement.^{25,26}

The first step in managing NPS is to rule out reversible conditions, including: underlying medical disease, infection, medication side-effects, as well as patient pain, constipation, and unmet basic needs (i.e. hydration, nutrition, and sleep).⁵

A treatment plan can be developed using both non-pharmacologic and pharmacologic treatment approaches to target multiple NPS, with priority given to treating the most distressful and unsafe symptoms first.²⁷ An overview of the evaluation of NPS is provided in Table 1.

Table 1 Approach to the Assessment of Neuropsychiatric Symptoms of Dementia²⁷⁻²⁹

Obtain history from patient (if possible) and caregiver(s)
Identify the specific behavioural and psychological symptoms of dementia
Evaluate reversible conditions (medical illness, infection, medication effects, pain, unmet basic needs)
Evaluate functional (i.e. hearing, vision, constipation) and environmental triggers
Evaluate caregiver burden
Ensure safety of patient and caregiver
Perform a thorough physical examination, including neurological examination guided by history
Cognitive assessment and standardized assessment tools for NPS (e.g. NPI)
Pertinent investigations (i.e. bloodwork/urinalysis, EKG, and neuroimaging where indicated)



APPROACH TO THE PATIENT WITH NEUROPSYCHIATRIC SYMPTOMS ASSOCIATED WITH DEMENTIA

REFERENCES

1. Alzheimer Society of Canada. *Rising Tide: The Impact of Dementia on Canadian Society* 2010.
2. Lyketsos, C.G., et al., *Prevalence of neuropsychiatric symptoms in dementia and mild cognitive impairment: results from the cardiovascular health study*. The Journal of the American Medical Association, 2002. **288**(12): p. 1475-1483.
3. Seitz, D., Purandare, N., & Conn, D., *Prevalence of psychiatric disorders among older adults in long-term care homes: A systematic review*. International Psychogeriatrics, 2010. **22**(7):p. 1025 – 1039.
4. Magaziner, J., et al., *The prevalence of dementia in a statewide sample of new nursing home admissions aged 65 and older: Diagnosis by expert panel*. The Gerontologist, 2000. **40**(6): p. 663-672.
5. Carswell-Opzoomer, A., et al., *Dementia in long-term care facilities: A survey of the Ottawa-Carleton Region*. Canadian Journal on Aging, 1993. **12**(3): p. 360-372.
6. Robertson, D., K. Rockwood, and P. Stolee, *The prevalence of cognitive impairment in an elderly Canadian population*. Acta Psychiatrica Scandinavica, 1989. **80** (4): p. 303-309.
7. Bernstein, A.B. and R.E. Remsburg, *Estimated prevalence of people with cognitive impairment: results from nationally representative community and institutional surveys*. The Gerontologist, 2007. **47**(3): p. 350-354.
8. Macdonald, A.J., et al., *Dementia and use of psychotropic medication in non-'Elderly Mentally Infirm' nursing homes in South East England*. Age & Ageing, 2002. **31**(1): p. 58-64.
9. Feldman, H., et al., *An estimate of the prevalence of dementia among residents of long-term care geriatric institutions in the Jerusalem area*. International Psychogeriatrics, 2006. **18**(4): p. 643-652.
10. Pitkala, K.H., et al., *Behavioral symptoms and the administration of psychotropic drugs to aged patients with dementia in nursing homes and in acute geriatric wards*. International Psychogeriatrics, 2004. **16**(1): p. 61-74.
11. McCarthy, J.F., F.C. Blow, and H.C. Kales, *Disruptive Behaviors in Veterans Affairs Nursing Home Residents: How Different Are Residents with Serious Mental Illness?* Journal of the American Geriatrics Society, 2004. **52**(12): p. 2031-2038.
12. Wagner, A.W., et al., *Behavior problems among dementia residents in special care units: changes over time*. Journal of the American Geriatrics Society, 1995. **43** (7): p. 784-7.
13. Selbaek, G., O. Kirkevold, and K. Engedal, *The prevalence of psychiatric symptoms and behavioural disturbances and the use of psychotropic drugs in Norwegian nursing homes*. International journal of geriatric psychiatry, 2007. **22**(9): p. 843-849.
14. Testad, I., A. Aasland, and D. Aarsland, *Prevalence and correlates of disruptive behavior in patients in Norwegian nursing homes*. International journal of geriatric psychiatry, 2007. **22**(9): p. 916-921.
15. Zuidema, S.U., et al., *Prevalence of neuropsychiatric symptoms in a large sample of Dutch nursing home patients with dementia*. International journal of geriatric psychiatry, 2007. **22**(7): p. 632-638.
16. Wancata, J., et al., *Non-cognitive symptoms of dementia in nursing homes: Frequency, course and consequences*. Social Psychiatry and Psychiatric Epidemiology, 2003. **38**(11): p. 637-643.
17. Margallo-Lana, M., et al., *Prevalence and pharmacological management of behavioural and psychological symptoms amongst dementia sufferers living in care environments*. International journal of geriatric psychiatry, 2001. **16**(1): p. 39-44.
18. Brodaty, H., et al., *Psychosis, depression and behavioural disturbances in Sydney nursing home residents: prevalence and predictors*. International Journal of Geriatric Psychiatry, 2001. **16**(5): p. 504-12.
19. International Psychogeriatrics Association. *Behavioral and Psychological Symptoms of Dementia Educational Pack*. 2002; Available from: <http://www.ipa-online.org/pdfs/BPSD.pdf>
20. Finkel, S., Costa, J., & Silva, E., *Behavioral and psychological signs and symptoms of dementia: a consensus statement on current knowledge and implications for research and treatment*. International Psychogeriatrics, 1996. **8**: p. 497-500.
21. Cohen-Mansfield, J., Marx, M.S., & Rosenthal, A.S., *A description of agitation in a nursing home*. Journals of Gerontology: Series A: Biological Sciences and Medical Sciences, 1989. **44**(3): p. M77-M84.
22. Cummings, J.L., et al., *The Neuropsychiatric Inventory: comprehensive assessment of psychopathology in dementia*. Neurology, 1994. **44**(12): p. 2308-2314.
23. Aalten, P., et al., *Behavioural problems in dementia: A factor analysis of the neuropsychiatric inventory*. Dementia and geriatric cognitive disorders, 2003. **15**(2): p. 99-105.
24. Conn D, Thorpe L. Assessment of behavioural and psychological symptoms associated with dementia. *The Canadian Journal of Neurological Sciences*. 2007;**34**:67-71.
25. Ballard C, Lowery K, Powell I, O'BRIEN J, James I. Impact of Behavioral and Psychological Symptoms of. *International psychogeriatrics*. 2000;**12**(1):93-105.
26. Yaffe K, Fox P, Newcomer R, et al. Patient and caregiver characteristics and nursing home placement in patients with dementia. *JAMA: the journal of the American Medical Association*. 2002;**287**(16):2090-2097.
27. Gitlin LN, Kales HC, Lyketsos CG. Nonpharmacologic Management of Behavioral Symptoms in Dementia. *JAMA: the journal of the American Medical Association*. 2012;**308**(19):2020-2029.
28. Hamilton P, Harris, D., LeClair, K., & Collins, J Putting the P.I.E.C.E.S. Together™: A Model for Collaborative Care and Changing Practice. A Learning Resource for Providers Caring for Older Adults with Complex Physical and Cognitive/Mental Health Needs and Behavioural Changes. *Tillsonburg, ON: ShopforLearning Publishers*. 2008;6th edition.
29. Sink KM, Holden KF, Yaffe K. Pharmacological treatment of neuropsychiatric symptoms of dementia. *JAMA: the journal of the American Medical Association*. 2005;**293**(5):596-608.

RESOURCES

First Link® - Connect persons with dementia and their family caregivers to support, information and services in their community.

<http://bit.ly/17GVlqH>

A Guide to Scheduling and Billing for Family Physicians (in Ontario):

<http://bit.ly/100q6iw>

Click on Dementia Newsletter for Physicians Vol. 1 No. 1, Fall 2010, page 1-2