Dementia in 2015: Prevention, Assessment, Management & Future Direction"

Dr. Bill Dalziel Medical Director, Geriatric Medicine Ambulatory Care & Day Hospital The Ottawa Hospital Professor- Geriatric Medicine The University of Ottawa whatever happened to our sexual relations? I don't know. I don't even think we got a christmas card from them this year.

What % of those at age 85 have Dementia?

1. 8% 2. 10% 3. 16% 4. 32% 5. 50%

Alzheimer's Disease is the Disease of the 21st Century

2030

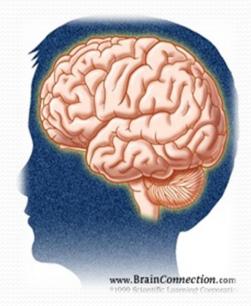
- USA 15 million people with dementia
- Canada 1.5 million people with dementia

Dementia: The Silent Epidemic

- A new case worldwide every 7 seconds
- A new case in Canada every 4 minutes (100,000 new cases per year), the prevalence will increase from now (450,000) to 750,000 by 2025
- 3rd most expensive disease in the Canadian Healthcare System
- 1 in 4 Canadians has a family member with dementia
- 1 in 2 Canadians knows someone with dementia
- Ontario has 100,000 drivers with dementia

What is Dementia?

Dementia is a <u>set of symptoms</u>, which includes loss of memory, understanding, and judgment.



First Link - Next Steps for Families

How is Dementia different from Normal Ageing?

Many complain of decreased ability to remember things BUT

- Typically the information comes to the individual later
- These changes do not interfere with function/occupation
- These changes are not progressive





Progressive: Changes from the disease increase over time

Degenerative: brain cells degenerate or break down

Irreversible: damage cannot be repaired

First Link – Next Steps for Families

Spectrum of Cognitive Change



Lee, 2013

Spectrum of Cognitive Change

- Normal Changes of Ageing
 - Mild forgetfulness
 - Not progressive
 - No functional change
- MCI
 - Cognitive change with no functional change
- Dementia
 - Cognitive change causing functional loss

Dementia – not a disease, but a set of symptoms that accompanies a disease



Alzheimer's Mixed Dementia Disease

Lewy Body **Dementia**

Frontotempoal Dementia

Vascular **Dementia**

Reversible Components of Memory Loss

- Depression
- Medications
- Nutritional disorders
- Metabolic disorders
- Other





- Short-term memory loss
- Difficulty concentrating
- Trouble following directions
- Unable to find right words
- Trouble with doing more complicated activities of daily living

Early Stage

- Less sparkle, spontaneity, ambition
- <u>Appears</u> indifferent, decreased interest
- Withdrawal from usual activities



Early Stage

What is happening to me?

- Getting lost
- Appears vague, uncertain, hesitant to initiate activities
- Forgetfulness disruptive to formal routines



Middle Stage

- Continued Memory problems
- Personality & Behaviour changes
- Assistance needed for personal daily tasks
- More executive and visuospatial problems
- Capacity issues



Dementia Quick Screen: 2 Minutes

- 3 item recall (**0-1 correct**: OR 3.1)
- Animals in 1 minute (<15: OR 20.2)
- Clock drawing (abnormal: OR 24)

Alzheimer Risk & Protective Factors Head Trauma Depression in men: 4x risk Smoking: 2x risk **Risk Factors** \downarrow TSH: 4 x risk Exposure to toxins (pesticides, fertilizers...): 4 x risk Vascular: Genetic risk factors •Lacunar/deep white matter infarcts: 20 x risk Family history (1° relative with AD 3.5 x risk) Apolipoprotein E e4 especially E4/E4 Female Gender •Hypertension & Hypotension Down's Syndrome Diabetes Mellitus Elevated homocysteine levels Low Education Decreased folate levels Pre-existing lower mental ability Increased lipids and/or cholesterol MCI Normal Dementia Age Diet: Fish, vegetables Physical activity **High Education** Apolipoprotein Moderate Alcohol Mental activities E e2 or e3 All lipid lowering drugs **Rich Social Networks Protective Factors** Statins NSAIDs?

Adapted from Fratiglioni et al, Lancet Neurology 2004: 343-53; Patterson et al. Alzh & Dementia 2007; 341-7; Scalco and van Reekum. Can Fam Physician 2006; 52: 200-7

Treatment Options

- 1. Prevention
- 2. Manage your health concerns:
 - Treat risk factors
 - Review drug side effects
- 3. Anti-Dementia drugs
- 4. Education & family support
- 5. Future Planning

Prevention

- 1. Recognize and treat ALL VRFs (vascular risk factors)
- 2. Go play outside: Exercise: walking and pumping
- 3. Stay in school...and keep learning
- 4. Wear a helmet.
- 5. Eat like your Italian Momma.

Prevention

- 6. Go find a nice girl or boy (and get married)
- 7. I love to cook with wine and SOMETIMES I even put it in the food.
- 8. Don't smoke or roll in the grass.
- 9. Go play with your friends.
- **10**. Don't Worry...Be Happy

Education

- Education is KEY!
 - First Link the Alzheimer Society
 - Booklets Dementia and Delirium
 - Depression
 - Medication Sheets

Community Resources

- Alzheimer Society
- Primary Care Outreach to Seniors
- Pharmacist at your local pharmacy
- Family Doctor
- Regional Geriatric Program Website
- Meal Delivery Services
- Senior Centers

- Emergency Response Systems,
- Safely Home Medic Alert
- Private Nursing services
- Veterans Affairs

Advance Care Planning

- "Advance Care Planning is a process of reflection and communication, a time for you to reflect on your values and wishes, and to let others know your future health and personal care preferences in the event that you become incapable of consenting to or refusing treatment or other care. "
- "Advance care planning means having discussions with family and friends, especially the person who will speak for you when you cannot"

• www.advancecareplanning.ca

Resources for Advance Care Planning

- Advance Care Planning Workbook Ontario Version
- Advance Care Planning Quick Guide Ontario version
- Community Legal Education Ontario "CLEO"
 - Power of Attorney for Personal Care
 - Ontario Attorney General Resources Google "Power of Attorney – Ontario"



Now! ... That should clear up a few things around here!