DEMENTIA: THE PROMISCUOUS DISEASE

Brendan Mulroy MD

OBJECTIVES:

- Update on Dementia
- Risk Factors

DISCLOSURES:

- I am CCFP trained
- o I am not a geriatrician
- I am not a psychiatrist

Dementia Diagnosis

- Impairment in at least two of: memory; reasoning; visuospatial abilities; language; or changes in personality/behaviour; AND
- The impairments "<u>interfere with the ability to function at</u> work or at usual activities"; are a decline from previous levels of functioning; AND
- Not explained by delirium or psychiatric disorder

Types of Dementia

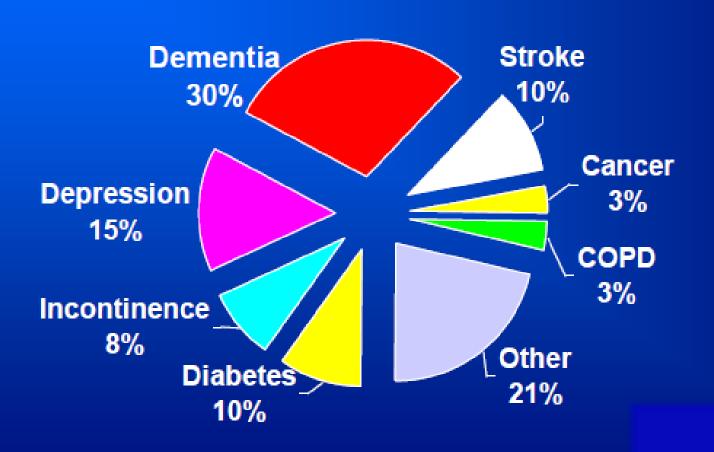
- Alzheimer's Disease (~60-70% of cases)
- Vascular Dementia (~20-30% of cases)
- \circ Other (~10% of cases)
 - Parkinson's Disease
 - Frontotemporal Dementia
 - Dementia with Lewy Bodies
 - Reversible Causes:
 - drug related
 - alcohol related
- Mixed Dementia
 - Overlapping AD and vascular pathology is likely most common, especially in oldest-old

DEMENTIA:

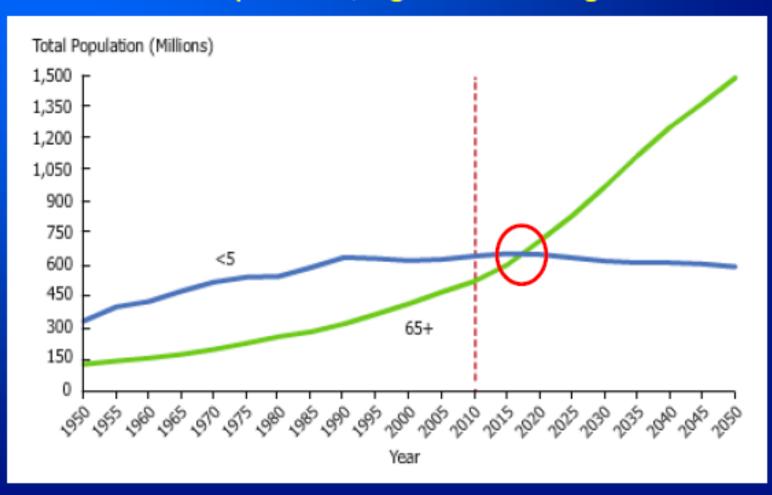
-INCIDENCE AND PREVALENCE

• Both in Decline

Dementia and the Family Informal Caregiving Time and Cost, USA



Demographic Imperative World Population, Age 65+ and Age <5



HOW TO MINIMIZE RISK OF DEVELOPING DEMENTIA

- Mental Stimulation
- Socialization
- Mediterranean Diet
- Physical Activity
- Restorative Sleep
- Avoid Anticholinergic Medications
- Avoid Alcohol

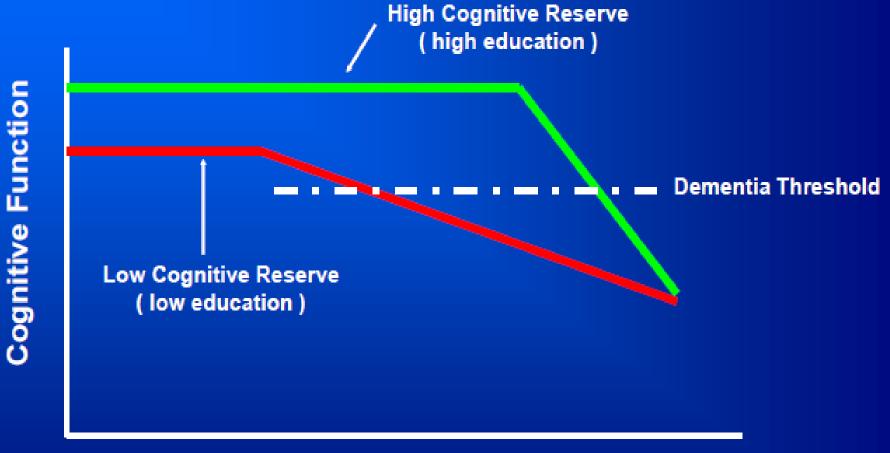
COGNITIVE RESERVE RESILIENCE

Education

SWEDISH STUDY 2009/2016

- The Kungsholmen Project
 - 931 Subjects
 - Age 75+
 - Test Scores age 9-10
- Higher education lowers risk of dementia
- Work complexity modulates dementia risk due to low education

Cognitive Reserve Hypothesis



Age

COGNITIVE RESILIENCE

• Requires "continuous deposits"

CASE 1: ST

- o 58 y/o male
 - Paranoia
 - Hx: Schizoaffective Disorder

CASE 1: CONTINUED

- Bizarre behaviour
 - Siding
 - Exorcism
 - Patents
 - Calendar
 - Fitness/diving
 - Book

CASE 1: CONTINUED

- \circ MoCA= 4/30
- MoCA= 26/30
- Manic Delirium- provoked by D/C antidepressants
- Mood stabilizer for Bipolar Disease

CASE 2: LG

- o 84 y/o male
- Declining- falling
- o CABG x4
- o T2DM
- Increased Bp
- Put on Sinemet

CASE 2: CONTINUED

- Grade 10 education
- Worked on the Great Lakes research ship
- Hunter
- Reading a novel
- Drove to Burlington

CASE 2: CONTINUED

- Within a week
 - Dramatic decline in language

CASE 2: CONTINUED

- o CSF 14 3 3 Protein
- EP-QuIC end point quaking induced conversion
- Sensitivity: 98%
- Specificity: 96%

CASE 3: DB

- o 65 y/o female
- Cognitive decline with anxiety
- Hx:
 - Depression
 - Anxiety
 - Hypertension

CASE 3: CONTINUED

- Moved from farm to an apartment
- Increasingly anxious/paranoid
- Shadowing
- Failed to respond to treatment

ECT

- Good response
- Depression induced dementia
 - (Pseudo-dementia of depression)

QUESTIONS?