

3rd Canadian Consensus Conference Recommendations on Diagnosis and Treatment of Dementia

Sid Feldman MD, CCFP
and
Morris Freedman MD, FRCPC
Baycrest
University of Toronto
May 2, 2008

Disclosures (M. Freedman)

Research Funding

Pfizer, Eli Lilly, Lundbeck

Honoraria for CME

Janssen-Ortho, Novartis, Pfizer, Lundbeck

Consulting

Janssen-Ortho, Novartis, Pfizer, Wyeth

Objectives

At the end of the session, participants will be able to apply recommendations from the 2006 Canadian Consensus Conference to diagnosis and treatment of

- Mild cognitive impairment
- Dementia

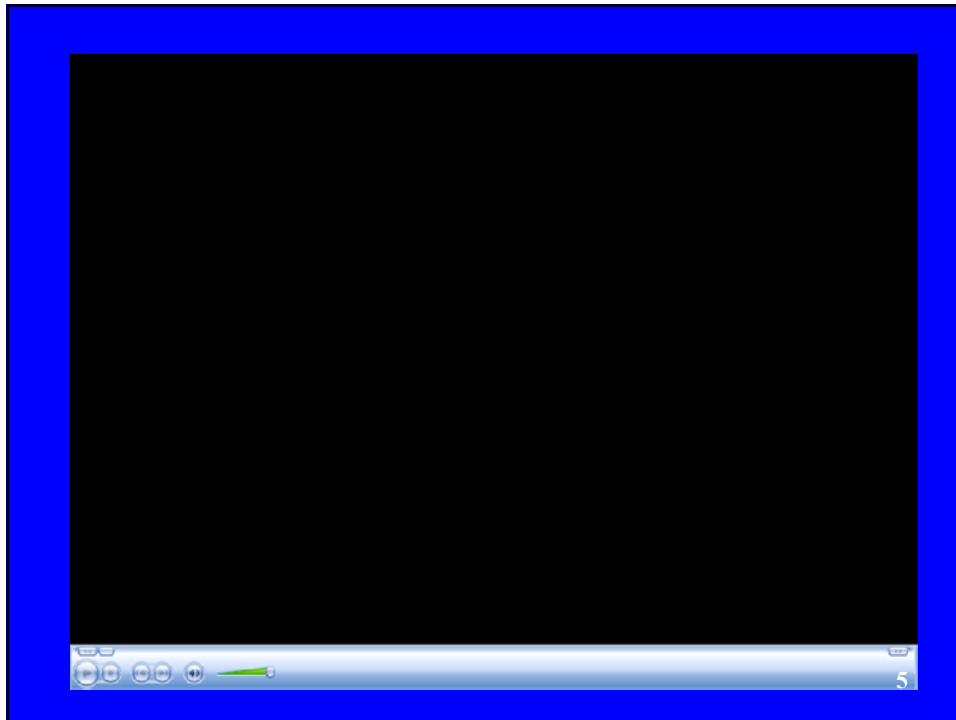
3

Case

- 72 year old male
- Memory decline x 3 – 5 years

Audio of patient

4



Question for Participants

Initial Diagnostic Thoughts

Are the memory complaints likely
due to normal aging?

Yes

No

Don't know

Behavioural Flags (Personal) : **(1-4)**



1. Poor historian, vague, seems “off,” repetitive questions and/or stories
2. Poor understanding or compliance with medications and/or instructions
3. Change in appearance, mood, personality, behaviour
4. Word-finding problems / decreased social interaction

7

Behavioural Flags (Personal) : **(5-7)**



5. Subacute change in function without clear explanation (“just not right”).
6. Confusion.
7. Head-turning sign (turning to caregiver for answers)

8

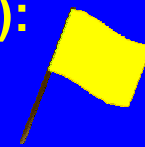
Behavioural Flags (Family): (1-4)



1. Frequent hospitalizations or visits to emergency room
2. Appearance, mood, personality, behaviour
3. Decreased social interaction
4. Subacute change in function without clear explanation (“just not right”).

9

Behavioural Flags (Family): (5-7)



5. Confusion.
6. Weight loss, dwindles, “failure to thrive”
7. Driving: accident, problems, tickets, family concerns

10

Patient has hypertension

Question for Participants

Is this information relevant to the diagnosis and management of dementia?

Yes

No

Don't know

11

Key Recommendation Points: Vascular Risk Factors

- There is **good evidence** to treat systolic hypertension (>160mm) in older individuals. In addition to reducing the risk of stroke, the incidence of dementia may be reduced
- Vascular risk factors and comorbidities impact on the development and expression of dementia. (**Fair evidence**)
- There is some evidence that treating hypertension may prevent further cognitive decline associated with cerebrovascular disease. (**Fair evidence**)

12

Question for Participants

What differential diagnosis is added
by history of vascular risk factors?

Vascular cognitive impairment (VCI)

Mild cognitive impairment (MCI)

Don't know

13

Vascular Cognitive Impairment

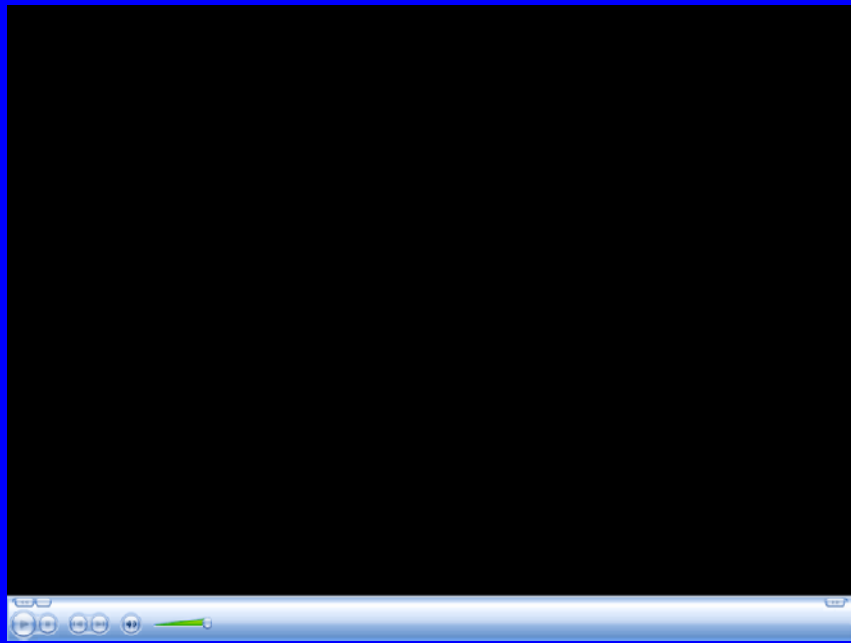
- Umbrella term
- Refers to full spectrum of cognitive deficits due to cerebrovascular disease
- Includes cognitive deficits pre-dementia and vascular dementia

O'Brien Am J Geriatric Psychiatry 2006

14

Audio of Patient

15



16

Question for Participants

What differential diagnosis is added
by the additional history?

Alzheimer's disease
Mild cognitive impairment (MCI)
Depression
Don't know

17

MCI: Amnestic

- Controversial concept
- Memory complaint
- Impaired memory
- No significant functional disability
- Not demented

18

Key Recommendation Points: MCI

- Most dementias are preceded by phase of mild cognitive decline
- MCI is high risk state for dementia (Fair Evidence)

19

General Neurological Exam

Normal except for tandem gait

20

Question for Participants

Which will be Most Useful for Dx?

Neuropsychological assessment

MMSE

MoCA

Clock drawing

21

Question for Participants

Which will be Most Practical in
Busy Office for Diagnosis?

Neuropsychological assessment

MMSE

MoCA

Clock drawing

22

Sensitivity and Specificity (%) MoCA and MMSE			
Cut-off	≥ 26	< 26	< 26
Group	Normal Controls	Mild Cognitive Impairment	Alzheimer Disease
(n)	(90)	(94)	(93)
MoCA	87	90	100
MMSE	100	18	78

www.mocatest.org

23

Key Recommendation Point MMSE and MoCA

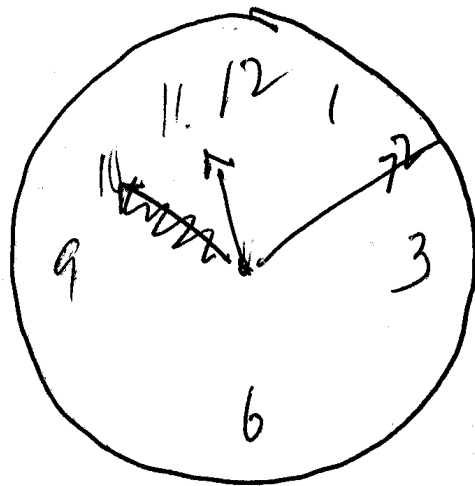
In cases where there is suspicion of cognitive impairment or concern about the patient's cognitive status, and the MMSE score is in the "normal" range (24-30), tests such as the MoCA may be helpful (**Fair Evidence**)

24

MMSE = 30/30

MoCA not done

25



26

Question for Participants

Diagnosis

Are you now considering a diagnosis of AD?

Yes

No

27

Neuroimaging

CT and SPECT: Normal

28

Question for Participants

Treatment Assuming Dx of MCI

Answer yes or no for each option

- No treatment
- Vitamin E
- Ginko biloba
- Cognitive activity
- Physical Exercise
- Cholinesterase inhibitor
- Estrogen

29

Treatment Assuming Dx of MCI

Recommendation Points

- Vitamin E (Fair against)
- Ginko biloba (Fair against)
- Cognitive activity (Insufficient evidence that this is beneficial; Fair evidence to promote as part of healthy lifestyle)
- Physical Exercise (Insufficient evidence that this is beneficial; Fair evidence to promote as part of healthy lifestyle)
- Cholinesterase inhibitor (Insufficient evidence)
- Estrogen (Fair evidence against)

30

Key Recommendation Point for Follow-up in MCI

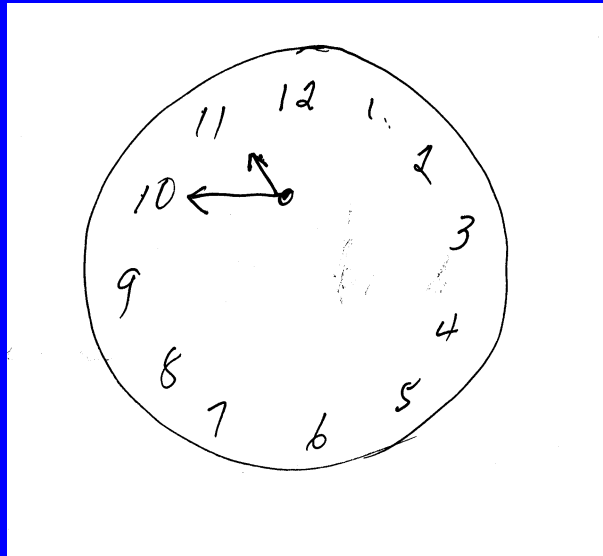
- Monitor closely due to high risk of conversion to dementia (Fair Evidence)

31

Few Years Later

MMSE 26/30

32

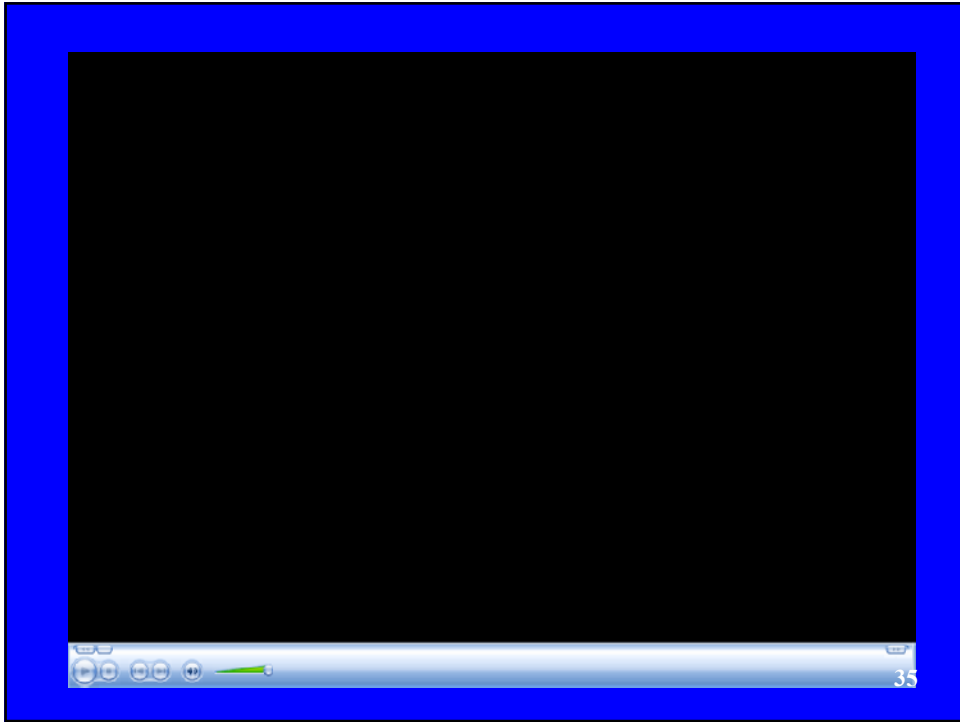


33

Three Word Recall

Audio

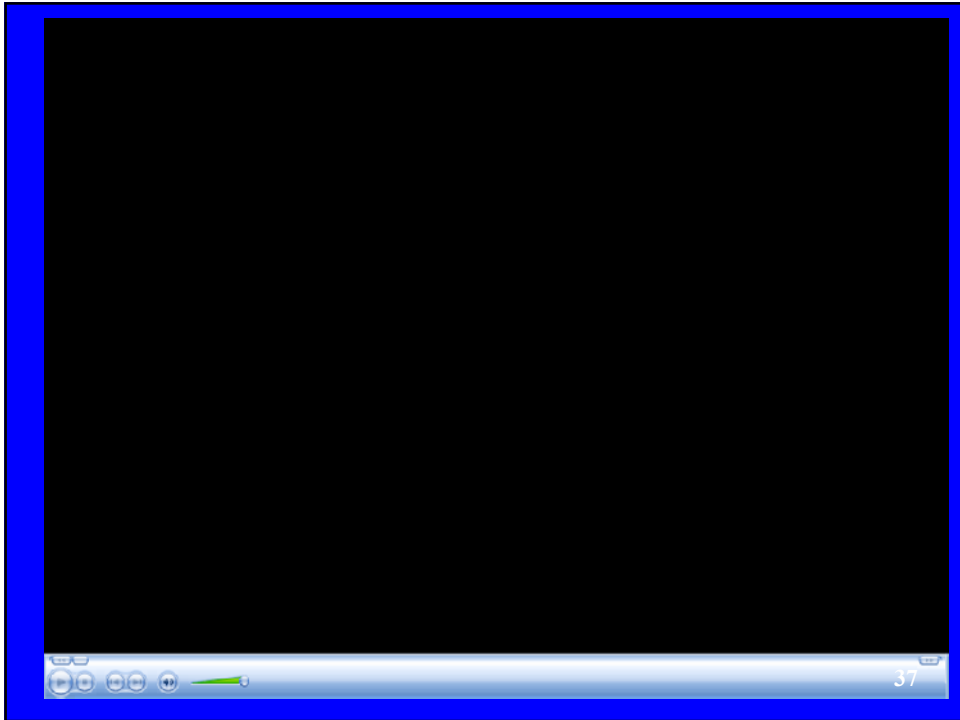
34



Attention

Serial 7s

Audio



Question for Participants

Diagnosis

Are you now considering a diagnosis of AD?

Yes

No

Question for Participants

What Treatment would you choose?

Cholinesterase inhibitor

Memantine

Don't know

39

Cholinesterase inhibitors

Key Recommendation Points

All three are modestly efficacious in mild to moderate AD (Good evidence)

40

Question for Participants

Is there evidence that one cholinesterase inhibitor is better than the others?

Yes

No

41

Key Recommendation Points re: Cholinesterase Inhibitors

- There is no evidence that one CI is more efficacious than another
- Basis for selection which agent to use should include adverse effect profile, and ease of use (**Fair Evidence**)

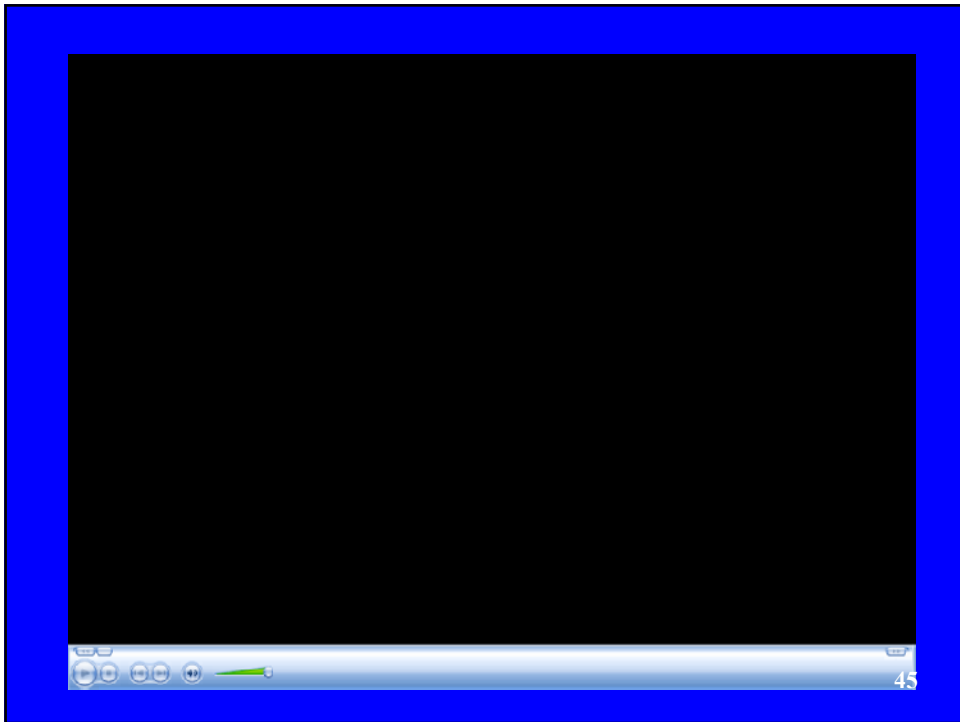
42

Key Recommendation Points: Adding Memantine

- Moderate to severe AD (Good Evidence)
- Often used in combination with a cholinesterase inhibitor

Behavioural problem

Video



Question for Participants

Treatment of Delusion

No treatment

Neuroleptic

Benzodiazepine

Trazodone

Key Recommendation Points: Delusions

- Try non-pharmacological approaches first (**Fair Evidence**)
- Combine pharmacological and non-pharmacological approaches if problem is severe (**Fair Evidence**)
- Neuroleptics can be used but must weigh benefits against risks such as cerebrovascular events and death (**Good Evidence**)

47

Agitation (Recommendation Points)

- Consider reducing or stopping ChEI
- Atypical neuroleptics (**good evidence for risperidone and olanzapine**)
NB Only published RCT for quetiapine negative and worsened cognition)
- Trazodone (**insufficient evidence for or against**)
- Citalopram
- Memantine
- Valproic acid, carbamazepine

48

Conclusions

- Selected key recommendations have been reviewed
- Refer to list of recommendations for reference as needed when clinical issues arise
- Use papers in CMAJ and Alzheimer's and Dementia as a resource