



Guideline Summary NGC-8442

Guideline Title

Dementia. Diagnosis and treatment.

Bibliographic Source(s)

Regional Health Council. Dementia. Diagnosis and treatment. Milan (Italy): Regione Toscana, Consiglio Sanitario Regionale; 2011. 38 p. [131 references]

Guideline Status

This is the current release of the guideline.

Scope

Disease/Condition(s)

Dementia

Guideline Category

Diagnosis

Management

Treatment

Clinical Specialty

Family Practice

Geriatrics

Internal Medicine

Neurology

Psychiatry

Intended Users

Advanced Practice Nurses

Nurses

Physician Assistants

Physicians

Psychologists/Non-physician Behavioral Health Clinicians

Social Workers

Guideline Objective(s)

To summarize the most reliable indications from scientific literature on assessment tests and pharmacological and non-pharmacological treatments of dementia, to benefit of general practitioners and health professionals involved in the diagnostic-therapeutic process

Target Population

Patients with suspected or confirmed dementia

Interventions and Practices Considered

Diagnosis

1. Assessment of clinical signs of dementia
2. Assessment of symptoms of depression using Geriatric Depression Scale
3. Assessment of delirium using diagnostic criteria
4. Assessment of dementia using diagnostic criteria
5. Use of anamnesis, general examination, assessment of possible iatrogenic causes, and structured interview
6. Assessment of pathological conditions
7. Assessment for presence of co-morbidities and risk factors
8. Blood tests
9. Brain imaging (computed tomography [CT], magnetic resonance [MR])
10. Referral to specialist, if indicated

Treatment

1. Pharmacological treatments
 - Treatment of core symptoms with acetylcholinesterase inhibitors and memantine
 - Treatment of associated symptoms with antidepressants or antipsychotics
2. Non-pharmacological treatments, including cognitive behavioral therapy (CBT), occupational therapy, and Reality Orientation Therapy (ROT)

Note: Mood stabilizers and benzodiazepines were considered but not recommended for the treatment of associated symptoms.

Major Outcomes Considered

- Accuracy and utility of diagnostic tests in differential diagnosis
- Effectiveness of pharmacological and non-pharmacological treatment
- Adverse effects of pharmacological treatment

Methodology

Methods Used to Collect/Select the Evidence

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

The following databases were searched: PubMed, the Cochrane Database of Systematic Reviews, the Cochrane Central Register of Controlled Trials, the Database of Abstracts of Reviews of Effects, Trip Database, Clinical Evidence, and the National Guideline Clearinghouse. The time frame was limited to the last decade, and the search was limited to systematic reviews and randomized controlled trials. Search terms were "dementia and primary and care," "dementia and diagnosis," "dementia and treatment or therapy," "dementia and pharmacological and treatment," "dementia and non-pharmacological and treatment," "dementia and neuroleptics or antipsychotics."

In addition, the most recent and accredited guidelines, and all available consensus statements expressed by the main scientific societies specialized in neurological pathologies have been consulted:

- Dementia Study Group of the Italian Neurological Society
- Scottish Intercollegiate Guidelines Network (SIGN) 86: Management of patients with dementia, February 2006
- Royal College of Physicians
- Royal Australian College of General Practitioners
- U.S. Preventive Services Task Force (USPSTF)
- Work group on Guideline for Alzheimer's Disease Management, 2008
- European Federation of the Neurological Societies (EFNS)
- National Institute for Health and Clinical Excellence (NICE) Clinical Guidelines
- Dementia and Neurodegenerative Diseases Research Network (DeNDRoN) Primary Care Study Group
- Database of Abstracts of Reviews of Effects (DARE)
- Cochrane Database of Systematic Reviews
- National Institute of Neurological Disorders and Stroke

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Level of Evidence

Level of Evidence

- I** Evidences from randomized controlled clinical trials and/or systematic reviews of randomized trials.
- II** Evidences from one single adequately designed randomized trial.
- III** Evidences from non-randomized cohort studies with concurrent or historical control or their metaanalysis.
- IV** Evidences from non-controlled retrospective case-control studies.
- V** Evidences from non-controlled case-series studies.
- VI** Evidences from experts' opinions or opinions from panels as indicated in guidelines or consensus conferences, or based on opinions from members of the work group responsible for this guideline.

Methods Used to Analyze the Evidence

Systematic Review

Description of the Methods Used to Analyze the Evidence

Comprehensive analysis of selected scientific literature by the panel of experts

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

Not stated

Rating Scheme for the Strength of the Recommendations

Strength of Recommendations

- A** Carrying out the specified procedure or diagnostic test is strongly recommended. The recommendation is supported by good-quality evidences, even if not necessarily type I or II.
- B** It would be inappropriate to always recommend the specified procedure or intervention, considered the still existing doubts, but it should anyway be carefully considered.
- C** Significant uncertainties exist against recommending to carry out the specified procedure or intervention.
- D** The specified procedure is not recommended.
- E** The specified procedure is strongly not recommended.

Cost Analysis

The guideline developer reviewed published cost analyses.

Method of Guideline Validation

Peer Review

Description of Method of Guideline Validation

Not stated

Recommendations

Major Recommendations

The grades of recommendations (A-E) and the levels of evidence (I-VI) are defined at the end of the "Major Recommendations" field.

General Indications for Diagnosis

- I/A** - The general practitioner knows the cognitive-behavioral profile of his/her patients and can identify the clinical signs of cognitive decay at their onset, taking also into account the observations of relatives.
- III/A** - The general practitioner should assess the presence of symptoms of depression in case of cognitive-behavioral alterations, adopting, if it is the case, psychometric tools and other professional competences. The use of the Geriatric Depression Scale with 15 items is suggested (see the original guideline document).
- III/A** - Delirium can be suspected in subjects presenting a clinical/behavioral profile similar to the one described by the *Diagnostic and Statistical Manual of Mental Disorders, 4th edition, Text Revision (DSM-IV-TR)* diagnostic criteria.

Diagnostic Criteria of Delirium Due to a General Medical Condition

(From Diagnostic and Statistical Manual of Mental Disorders, IV Edition, Text Revision, 2000)

- Disturbance of consciousness (reduced clarity of awareness of the environment) with reduced ability to focus, sustain, or shift attention.
- A change in cognition (such as memory deficit, disorientation, language disturbance) or the development of a perceptual disturbance that is not better accounted for by a preexisting, established, or evolving dementia.
- The disturbance develops over a short period of time (usually hours to days) and tends to fluctuate during the course of the day.

- There is evidence from the history, physical examination, or laboratory findings that the disturbance is caused by the direct physiological consequences of a general medical condition

I/A - Dementia can be suspected in subjects presenting a clinical profile similar to the one described by the DSM-IV criteria for the definition of dementia.

Diagnostic Criteria for Dementia from the DSM-IV, 1994 (multiple etiologies)

A The development of multiple cognitive deficits manifested by both

1. Memory impairment (impaired ability to learn new information or to recall previously learned information)
2. One (or more) of the following cognitive disturbances:
 - Aphasia (language disturbance)
 - Apraxia (impaired ability to carry out motor activities despite intact motor function)
 - Agnosia (failure to recognize or identify objects despite intact sensory function)
 - Disturbance in executive functioning (planning, organizing, sequencing, abstracting)

B The cognitive deficits in Criteria A1 and A2 each cause significant impairment in social or occupational functioning and represent a significant decline from a previous level of functioning.

C The deficits do not occur exclusively during the course of a delirium.

I/A - The general practitioner raises the diagnostic hypothesis of dementia through the anamnesis, a general examination, an assessment of possible iatrogenic causes, and a structured interview, carried out within a multi-professional team.

VI/A - General practitioners should assess all pathological conditions that could cause cognitive disorders.

VI/A - In raising the diagnostic hypothesis of dementia, general practitioners should assess the presence of co-morbidities and identify risk factors due to social isolation.

VI/B - General practitioners should prescribe blood tests to patients with suspect dementia.

VI/A - General practitioners should prescribe to patients with suspect dementia a brain imaging exam (computed tomography [CT] or magnetic resonance [MR]) for a diagnostic definition of dementia.

VI/A - General practitioners can refer to specialist services for diagnostic confirmation, differential diagnosis, and for the organization of interventions and stabilization of complex situations.

Treatment

Pharmacological Treatment

Core Symptoms

Acetylcholinesterase Inhibitors

I/A - Starting a therapy with acetylcholinesterase inhibitors, whose effectiveness on core symptoms is proven, should be considered at moment of diagnosis of mild and moderate Alzheimer's disease. Expected benefits and potential adverse effects of the treatment should be discussed with patients and caregivers. Evidence of effectiveness of acetylcholinesterase inhibitors is available also in dementia with Lewy bodies and in dementia associated with Parkinson's disease. The option of starting a therapy with memantine should be considered in patients with moderate-severe Alzheimer's disease to treat core symptoms. No evidence is available on natural remedies.

Associated Symptoms

Antidepressant Drugs

VI/B - The use of antidepressant drugs, preferably selective serotonin reuptake inhibitors (SSRI), can be useful in the treatment of patients with dementia and depression. Trazodone can be useful in case of agitation.

Antipsychotic Drugs

II/A - Antipsychotic drugs have partial efficacy in the treatment of psychosis and aggressiveness associated with dementia. Their use should be limited to at-risk, or extremely suffering patients or caregivers, and should be limited if possible in time, due to the potentially severe adverse effects of these drugs. Associations of antipsychotic drugs should be avoided.

Mood Stabilizers

V/A - There is currently no evidence supporting the use of mood stabilizers for the treatment of behavioral disorders in patients with dementia.

Benzodiazepines

V/A - There is no evidence supporting the use of benzodiazepines in patients with dementia.

Non-pharmacological Treatments (Behavioral)

V/A - The first line treatment for psychological and behavioral disorders is non-pharmacological, due to the potentially severe adverse effects caused by pharmacological treatments. The possibility of a non-pharmacological treatment for cognitive disorders should be considered at the diagnosis of dementia, even if evidence from the literature is not conclusive. Expected benefits should be discussed with patients and caregivers, and times and ways for the training and support of caregivers should be planned. General practitioners should refer to specialist services for these activities.

Definitions:

Level of Evidence

I Evidences from randomized controlled clinical trials and/or systematic reviews of randomized trials.

II Evidences from one single adequately designed randomized trial.

III Evidences from non-randomized cohort studies with comparison or historical control or their meta-analysis

III Evidences from non-randomized cohort studies with concurrent or historical control or their metaanalysis.

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VI Evidences from experts' opinions or opinions from panels as indicated in guidelines or consensus conferences, or based on opinions from members of the work group responsible for this guideline.

Strength of Recommendations

A Carrying out the specified procedure or diagnostic test is strongly recommended. The recommendation is supported by good-quality evidences, even if not necessarily type I or II.

B It would be inappropriate to always recommend the specified procedure or intervention, considered the still existing doubts, but it should anyway be carefully considered.

C Significant uncertainties exist against recommending to carry out the specified procedure or intervention.

D The specified procedure is not recommended.

E The specified procedure is strongly not recommended.

Clinical Algorithm(s)

None provided

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see the "Major Recommendations" field).

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Accurate diagnosis and appropriate treatment of dementia

Potential Harms

- *Acetylcholinesterase inhibitors*: Adverse effects include cholinergic overstimulation.
- *Memantine*: Reported adverse effects are instability, headache, stypsis, and sleepiness.
- There is a risk of increasing brain vascular accidents with *risperidone* and *olanzapine*.
- Several data from the literature suggest that the use of *typical* and *atypical antipsychotic drugs* is associated with an increased risk of total mortality in older patients with dementia and with an increased risk of sudden cardiac death in the general population. These drugs are also associated with extrapyramidal side effects, such as parkinsonism, acute dystonia, acathisia, late dyskinesia, perioral tremor, and malignant neuroleptic syndrome.

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Living with Illness

IOM Domain

Effectiveness

Identifying Information and Availability

Bibliographic Source(s)

Regional Health Council. Dementia. Diagnosis and treatment. Milan (Italy): Regione Toscana, Consiglio Sanitario Regionale; 2011. 38 p. [131 references]

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2011

Guideline Developer(s)

Regione Toscana, Consiglio Sanitario Regionale - State/Local Government Agency [Non-U.S.]

Source(s) of Funding

Regione Toscana, Consiglio Sanitario Regionale

Guideline Committee

Regional Health Council

Composition of Group That Authored the Guideline

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Financial Disclosures/Conflicts of Interest

All the writers of this guideline, chosen for their expertise, have compiled a statement on possible conflicts of interest occurred in the job processing. Each has fully performed the work as part of their work for the Tuscan Health System (SST).

Guideline Status

This is the current release of the guideline.

Guideline Availability

Electronic copies: Available in Portable Document Format (PDF) from the [Regione Toscana, Consiglio Sanitario Regionale Web site](#).

Print copies available upon request from Mrs. Giuseppina Agata Stella, Regione Toscana, Consiglio Sanitario Regionale, via T. Alderotti 26/n, 50139 Firenze, Italy or e-mail to csr@regione.toscana.it.

Availability of Companion Documents

None available

Patient Resources

None available

NGC Status

This NGC summary was completed by ECRI Institute on August 3, 2011. The information was verified by the guideline developer on September 5, 2011.

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