





Tests, treatments and procedures at risk of inappropriateness in Italy that Physicians and Patients should talk about.

Five Recommendations from Cochrane Neurological Sciences Field (CNF) - 1st List

Don't recommend enteral nutrition (PEG, percutaneous endoscopic gastrostomy or naso-gastric feeding tube) in patients with advanced dementia; instead offer oral assisted feeding.

Enteral nutrition is aimed at maintaining or improving patient quality of life and functionality, and prolonging survival. In patients with severe dementia, functional decline and comorbidities may suggest poor long-term benefits from enteral nutrition. Furthermore, in the decision-making process, the risks of feeding tube insertion and maintenance should be lower than the expected benefits.

Clinical studies have shown that, during the final stage of dementia, PEG and naso-gastric tube are associated with pressure ulcers, increased use of physical and chemical restraints for agitation, patient discomfort, possible fluid overload, diarrhea, pain and local complications, low socialization time and possible increase of aspiration pneumonia. In patients with severe dementia, careful hand feeding should be preferred in order to guarantee patient well-being and social interactions, rather than nutritional intake (comfort feeding).

Don't use antipsychotics as the first choice to treat behavioral symptoms of dementia, avoiding prescription before careful evaluation and removal of precipitating factors.

People with dementia often exhibit behavioral symptoms such as agitation, aggression, anxiety, irritability, depression, apathy and psychosis. In this context, antipsychotic medicines are often prescribed, but they often provide limited and inconsistent benefits, with possible severe side effects (increased likelihood of strokes and mortality, parkinsonism or other extrapyramidal symptoms, falls, fractures, sedation, confusion, cognitive worsening, weight gain and urinary tract disturbances).

Antipsychotic drugs should only be used for the treatment of agitation or psychosis in patients with dementia when symptoms are severe, dangerous, and/or cause significant distress to the patient. Identifying and addressing causes of behavior change (including infections, pain, constipation, environmental factors like noise or temperature), securing patients, mobilization, reducing discomfort and general functions assistance, can make drug treatment unnecessary. If a risk/benefit assessment favors the use of an antipsychotic, treatment (preferring atypical antipsychotics) should be initiated at a low dose and titrated up to the minimum effective dose and duration.

Don't use benzodiazepines or other sedative-hypnotics in older adults as first choice for insomnia.

Older adults have increased sensitivity to benzodiazepines and other hypnotics and decreased drug metabolism. In general, all benzodiazepines increase risk of cognitive impairment, delirium, falls, fractures and motor vehicle accidents, leading to hospitalization and death. Older patients, their families and their caregivers should recognize these potential harms when considering treatment strategies for insomnia, agitation or delirium. Use of benzodiazepines may be appropriate for seizures, REM sleep behavior disorders, alcohol/benzodiazepines withdrawal symptoms, severe generalized anxiety disorder and periprocedural anesthesia.

Don't recommend brain ¹⁸F-FDG PET (positron emission tomography) in the diagnostic investigation of dementia when clinical and neuropsychological assessment, laboratory tests and basic neuroimaging adequately support diagnosis.

FDG-PET imaging investigates brain glucose hypometabolism. When clinical and neuropsychological assessment, laboratory tests and basic neuroimaging adequately support dementia diagnosis and aetiology, further exams provide inconsistent diagnostic benefits.

On the other hand, this exam is useful in case of atypical presentation, early age at onset or "mixed" clinical manifestations (i.e. combined presence of cognitive, behavioral and/or motor disturbances), with the following recommendations:

- another disease than Alzheimer's disease suspected (i.e. fronto-temporal dementia), and no movement disorder symptoms observed: 18F-FDG PET
- cognitive deficits plus movement disorder symptoms (i.e. dementia with Lewy bodies suspected): DaT SPECT, possibly with ¹⁸F-FDG PET
- in case of doubt, an evaluation of dementia expert should precede exams recommendation.

Don't recommend Amyloid PET (positron emission tomography) in asymptomatic individuals without cognitive impairment, even in the presence of a familiarity for dementia, and in subjects reporting deficits not confirmed by the neuropsychological evaluation.

Amyloid PET is not a diagnostic test for Alzheimer's disease but rather an index of cerebral amyloidosis, and may be positive in other forms of dementia (i.e. dementia with Lewy bodies), and in asymptomatic subjects. Furthermore, the accuracy of this exam decreases when age of patients increases.

The use of amyloid PET is not recommended in the following conditions: patients who met the criteria for probable Alzheimer's disease and with a typical age at onset; for the definition of the severity and for the follow-up of the cognitive impairment (fundamental role of neuropsychological evaluation); for asymptomatic individuals, even in the presence of a familiarity for dementia and/or with one or two of the £4 alleles of the apolipoprotein E (ApoE); for subjective cognitive impairment (patients reporting deficits not confirmed by the objective neuropsychological evaluation); as an alternative to the genetic testing; for non-medical use (legal and insurance purposes).

Please note that these items are provided only for information and are not intended as a substitute for consultation with a clinician. Patients with any specific questions about the items on this list or their individual situation should consult their clinician.

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How this list was created

In November 2013 the Cochrane Neurological Sciences Field (CNF) searched the list of recommendations published in Choosing Wisely for those of interest from a neurological point of view, dealing with dementia. The first three recommendations of present list are adapted from Choosing Wisely Master List (American Academy of Hospice and Palliative Medicine, American Geriatrics Society, AMDA − Dedicated to Long Term Care Medicine™, American Psychiatric Association) and were found to be adequate for the Italian situation. The fourth recommendation, initially inspired to the corresponding one by the Society of Nuclear Medicine and Molecular Imaging, has been radically amended and updated in January 2015. The last recommendation arose from the need to identify the correct use of diagnostic imaging, recently introduced in cognitive impairment, warning of the risk of over-diagnosis. All recommendations were subsequently updated in 2022.

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Johnson KA, Minoshima S, Bohnen NI, Donohoe KJ, Foster NL, Herscovitch P, Karlawish JH, Rowe CC, Carrillo MC, Hartley DM, Hedrick S, Pappas V, Thies WH; Alzheimer's Association; Society of Nuclear Medicine and Molecular Imaging; Amyloid Imaging Taskforce. Appropriate use criteria for amyloid PET: a report of the Amyloid Imaging Task Force, the Society of Nuclear Medicine and Molecular Imaging, and the Alzheimer's Association. Alzheimers Dement. 2013 Jan;9(1):e-1-16. doi: 10.1016/j.jalz.2013.01.002. Kolanko MA, Win Z, Loreto F, Patel N, Carswell C, Gontsarova A, Perry RJ, Malhotra PA. Amyloid PET imaging in clinical practice. Pract Neurol. 2020 Dec;20(6):451-462. doi: 10.1136/practneurol-2019-002468. Slow Medicine. an Italian movement of health professionals, patients and citizens The Cochrane Neurological Sciences Field (CNF) is an entity of the Cochrane promoting a Measured, Respectful and Equitable Medicine, launched the Collaboration; It was formally registered in 2000. Headquarters were in Milan, at the campaign "Doing more does not mean doing better- Choosing Wisely Italy" University Department of Neurological Sciences, until 2006, since 2007 it has been based in Italy at the end of 2012, similar to Choosing Wisely in the USA. The campaign

of Aut. Prov. of Bolzano, Zadig www.choosingwiselvitaly.org; www.slowmedicine.i

aims to help physicians, other health professionals, patients and citizens engage

in conversations about tests, treatments and procedures at risk of

inappropriateness in Italy, for informed and shared choices. The campaign is part

of the Choosing Wisely International movement. Partners of the campaign are the

National Federation of Medical Doctors' and Dentists' Orders (FNOMCeO), that of

Registered Nurses' Orders (FNOPI), the Academy of Nursing Sciences (ASI),

National Union of Radiologists (SNR), Tuscany regional health agency,

PartecipaSalute, Altroconsumo, the Federation for Social Services and Healthcare

Collaboration; It was formally registered in 2000. Headquarters were in Milan, at the University Department of Neurological Sciences, until 2006, since 2007 it has been based in Perugia at the Region Umbria Health Authority. The main objective of the CNF is to disseminate Cochrane reviews of neurological interest, promoting evidence-based medicine, building links between review authors, clinicians, patients, their families and administrators to contribute to the health information of citizens and provide scientific support to health professionals and decision makers. The team is made up of the director of the field, the coordinator, clinical neurologists, administrative staff, and archive management.

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