

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

**Five Recommendations from the Italian Society Parkinson
and Movement Disorders/LIMPE-DISMOV**

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| 1 | <p>Do not use brain scintigraphic examinations such as brain SPECT (Single Photon Emission Tomography) with dopamine transporter marker (DAT-SCAN) or myocardial examination with Metaiodobenzylguanidine (MIBG) as well as positron emission brain tomography (PET) with any radionuclide, for diagnostic confirmation of Parkinson's disease or to evaluate its progression.</p> <p>The finding of a positive brain SPECT (single photon emission tomography) scan with dopamine transporter marker (DAT-SCAN) does not establish a diagnosis of Parkinson's disease, which is instead based on the presence of clinical elements that meet the current diagnostic criteria. The test should therefore not be performed to confirm the diagnosis but may be required in selected cases for the differential diagnosis with non-neurodegenerative tremor syndromes where a diagnostic doubt exists. Similarly, myocardial scintigraphy with metaiodobenzylguanidine (MIBG) should not be used at the diagnostic stage but should be reserved in selected cases where there is a diagnostic uncertainty between Parkinson's disease and another Atypical Parkinsonism (in particular, Multisystem Atrophy). In any case, special care is recommended when interpreting the results of a SPECT examination, considering that concomitant therapies (e.g., antidepressants) or pre-existing conditions (e.g., diabetes) could distort the examination. Positron Emission Tomography of the brain (PET) with various radionuclides (FDG, F-DOPA) is also not indicated for the diagnostic confirmation of Parkinson's disease and should only be used if there is a diagnostic doubt to other diseases. None of the above tests is considered useful in assessing the progression of Parkinson's disease to date. In general, the indication and interpretation of instrumental tests must therefore be considered in the context of each individual patient's clinical history.</p> |
| 2 | <p>Do not use drugs that may worsen the symptoms of Parkinson's disease, such as anti-dopaminergic, aliphatic and anticholinergic drugs, without consulting your neurologist.</p> <p>People with Parkinson's disease may require medication for other reasons. Their general practitioner should therefore be careful to consider any prescriptions from other specialists for drugs that may worsen certain motor and non-motor symptoms of the disease. Sometimes, these are 'over-the-counter' drugs. These include, for example, drugs with anti-dopaminergic action that are commonly used to treat nausea (metoclopramide) or motion sickness (promethazine), drugs that induce/worsen orthostatic hypotension such as the alpha-lithics often used for benign prostatic hyperplasia, or anticholinergics used for overactive bladder symptoms that may worsen cognitive and neuropsychiatric symptoms of the disease. Similarly, neurologists should avoid the use of anticholinergics for the treatment of motor symptoms of the disease, although these have been used in the past, and for the treatment of psychosis in Parkinson's disease, use only quetiapine or clozapine and avoid first-generation neuroleptics due to their anti-dopaminergic action. It is good practice to consult the referring neurologist for potential drug-drug interactions, especially when other specialists prescribe drugs acting on the central nervous system.</p> |
| 3 | <p>Do not delay prescribing levodopa if appropriate, and instead, do not use drugs for the complicated phase of the disease prematurely.</p> <p>Levodopa prescription as a drug treatment in Parkinson's disease is often delayed in favour of other drug categories (such as dopamine agonists) due to concerns about the risk of drug-induced motor complications or levodopa toxicity. However, recent evidence has mitigated these concerns and thus levodopa can be introduced early if required by the patient's clinical condition, although using a low dosage. Conversely, there is no evidence that the use of drugs indicated in the complicated phase of the disease (such as COMT catechol-O-methyltransferase inhibitors) reduce the risk of motor complications of the disease and should therefore be avoided in the earliest stages.</p> |
| 4 | <p>Do not abruptly discontinue/modify Parkinson's disease therapy</p> <p>According to recent evidence, therapy with anti-Parkinsonian drugs is inappropriately discontinued or modified in a large percentage (up to 75%) of patients with Parkinson's disease who are admitted to emergency or non-neurological hospital wards. This is one of the factors that may lead to a worse outcome in patients with Parkinson's disease who undergo operative procedures compared to age-matched controls. Anti-Parkinsonian therapy should not be discontinued or abruptly modified without the advice of the neurologist, who may optimise the therapy intake to some extent on a case-by-case basis, e.g., by potentiating transdermal drugs if the patient needs remain fasting in the pre-operative phase.</p> |
| 5 | <p>Do not underestimate the importance of multidisciplinary and non-pharmacological approaches.</p> <p>Although the first line of intervention in Parkinson's disease is pharmacological, recent evidence has shown that multidisciplinary therapy using non-drug approaches can improve the symptoms of the disease or even slow its progression. These include regular aerobic physical activity, performed three times a week at 70-80% of maximum cardiac output. Although there are no studies on disease progression, a great deal of evidence has accumulated showing that a healthy, Mediterranean-type diet with little consumption of processed/refined animal derivatives and rich in antioxidants reduces the risk of the disease: a healthy, balanced diet should therefore also be adopted in patients with the disease. Finally, patients should adopt a 'participative' approach to disease management by encouraging mental exercise and resilience, with information and support from professionals.</p> |

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.

How this list was created

These 5 recommendations were identified by the Academy for the Study of Parkinson's Disease and Movement Disorders (LIMPE-DISMOV Academy). The five recommendations related to Parkinson's disease were selected during a meeting of the board of the LIMPE-DISMOV Academy on the basis of a list drawn up by the individual members of the board. Each member of the board has indicated a practice, commonly carried out in Italy, for which there are well-founded reasons to consider possible its inappropriate use, which does not bring significant benefits to patients, but rather a greater incidence of side effects or inadequate care. In the selection process, the board of the LIMPE-DISMOV Academy took into careful consideration the level of evidence of the practices that was recently revised in the "Linea Guida Diagnosi e Terapia della Malattia di Parkinson" published in 2013 and updated in 2015, drafted by LIMPE in collaboration with the "Istituto Superiore di Sanità. All recommendations were revised in 2022.

Sources

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Slow Medicine ETS, an Italian Third Sector organization of health professionals, patients and citizens promoting a Measured, Respectful and Equitable Medicine, launched the campaign "**Doing more does not mean doing better- Choosing Wisely Italy**" in Italy at the end of 2012, similar to Choosing Wisely in the USA. The campaign 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 of Aut. Prov. of Bolzano, Zedig.

www.choosingwiselyitaly.org; www.slowmedicine.it

The Italian Society Parkinson and Movement Disorders/LIMPE-DISMOV, was born from the merging of the two major Scientific Associations dedicated to Parkinson's disease and movement disorders: LIMPE (Lega Italiana per la lotta contro la Malattia di Parkinson, le Sindromi Extrapiramidali e le Demenze - founded in 1974) and DISMOV-SIN (Associazione Italiana Malattia di Parkinson e Disordini del Movimento - founded in 1987). In recent years, a series of elements such as common cultural interests and objectives, the fact that many members of the profession were associates of both societies and, finally, the need for a more rational economic management led to the merging of the two associations in 2014. The objectives of the Society are: 1.to constitute a national scientific point of reference to promote and disseminate knowledge in the field of Parkinson's disease and movement disorders in the interest of health professionals and patients; 2.to promote and support both clinical and experimental research, and to stimulate the development of clinical protocols, favouring the conduct of multicentric and multidisciplinary studies; 3.to contribute to the continuous updating of health professionals in the field of Parkinson's disease and movement disorders; 4. to carry out professional development and continuing healthcare education activities, with annual training programmes in accordance with the national ECM programme; 5. to establish cultural, scientific and practical exchange relations with foundations and/or scientific associations, both national and international, and with associations of healthcare professionals and patients (or their families) that pursue aims similar to those of the Academy; 6. to act as a point of reference with any public and private healthcare bodies, <https://www.accademialimpedismov.it/>