





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) – 2nd List

Transient Loss of Consciousness

	In the anamnestic reconstruction of a possible transient loss of consciousness, do not fail to clarify whether the characteristics of the suspension of consciousness actually occurred and to draw up a list of all drugs in use.
1	The loss of consciousness must be adequately witnessed, or the patient must be able to state that for a certain interval of time he has not perceived himself or the surrounding environment; it is common that the diction loss of consciousness is used inappropriately to describe a general malaise.
	The drug history allows to identify the habitual or accidental use of drugs that favor a hypotensive condition or a bradycardia. In this case, adequate therapeutic indications (for example: reduction of the dosage or number of antihypertensives, replacement of the beta blocker) can prevent the episode from recurring.
	In the clinical evaluation of the patient who has presented a transient loss of consciousness, do not leave out the measurement of blood pressure in the supine and standing position (horizontal and upright position) in order to exclude a condition of persistent orthostatic hypotension.
2	Orthostatic hypotension is defined as a reduction in systolic pressure higher than 20 mm Hg or in diastolic pressure higher than 10 mm Hg compared to supine (horizontal position) after 3 minutes of standing (standing position) This condition is not always poorly tolerated by the patient - that is, it does not necessarily involve orthostatic intolerance - and therefore must be carefully evaluated in the clinical context.
	If recorded orthostatic hypotension is correlated with the episode of transient loss of consciousness, this requires the exclusion of cardiac, neurological and iatrogenic causes (diuretics, alpha-adrenergic blockers, calcium channel blockers, nitrates, tricyclic antidepressants, levo-dopa, antipsychotics); the identification of the condition leads to its treatment and, if possible, its prevention.
	Do not perform an electroencephalogram (EEG) to patients who have experienced only transient loss of consciousness and have normal neurological examination and no history of epileptic symptoms.
3	In this context, it is extremely unlikely that the EEG will add elements to the clinical and anamnestic evaluation. The EEG, on the other hand, is indicated if the following signs / symptoms suggestive of an epileptic seizure have been observed: bite of the tongue, head turned to one side or other specific postures, emotional changes witnessed before, during or after loss of consciousness, prolonged clonic movements of the limbs (consider that brief shocks can occur in cardiogenic syncope without epileptic significance), confusion at the end of the event and prodromes such as sensations of déjà vu or déjà-vécu (already seen or already experienced). An epileptic condition represents the most frequent neurological cause of loss of consciousness.
	Do not perform supra-aortic trunks ultrasound to patients who have experienced transient loss of consciousness in the absence of other neurological symptoms and with normal neurological examination. Adapted from the American Academy of Neurology
4	A vertebrobasilar TIA (transient ischemic attack) can cause loss of consciousness, but it is always accompanied by neurological signs such as motor or sensory loss in the face and / or limbs, coordination impairment, homonymous lateral hemianopia, balance and gait disturbances, drop attacks, diplopia, dysphagia, dysarthria or vertigo. Carotid occlusion does not cause fainting but focal neurological signs such as unilateral weakness. The radiological study of the carotids is unable to identify the cause of the loss of consciousness and increases costs. Loss of consciousness is a frequent symptom and experienced by 40% of the population during life.
	Do not perform computed tomography (CT) or nuclear magnetic resonance imaging (MRI) of the brain to
	symptoms and have normal neurological examination. Adapted from the American College of Physicians
5	In patients who have experienced a witnessed loss of consciousness, without the suspicion of seizure and in the absence of other neurological signs or symptoms, the probability that central nervous system damage is the cause is very low and imaging of the brain does not improve prognosis. Imaging of the brain may be indicated in selected cases in which head trauma caused by loss of consciousness is suspected.

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.

released: 1 February 2015 - last updated: August 2021

How this list was created

In 2014 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 transient loss of consciousness. Two recommendations have been included in the present list (number 4 adapted from the American Academy of Neurology and number 5 adapted from the American College of Physicians) but the term *transient loss of consciousness* has been preferred to the original *syncope* because the first means the symptom to be evaluated and the second the conclusion of a diagnostic process. *Transient loss of consciousness* is intended as in NICE 2010: "*transient loss of consciousness is the medical term for a blackout and can be defined as spontaneous loss of consciousness with complete recovery (full recovery of consciousness without any residual neurological deficit)*". Other three recommendations in this list are original, identified in the Italian medical practice (1, 2 and 3) and discussed in the CNF with the contribution of other clinicians on the behalf of AINAT, Italian Association of Out-Patient Department Neurologists. All recommendations were updated in 2021.

Sources

	1.	NICE National Institute for Health and Clinical Excellence. Transient loss of consciousness ('Blackouts') Management in adults and young people. London: Royal College of Physicians (UK); 2010:8, 14.
1	2.	NICE National Institute for Health and Clinical Excellence. Clinical Guidelines, No. 109Transient loss of consciousness ('blackouts') in over 16s London: 2014 Sep. ISBN-13: 978-1-4731-2287-1
	3.	ESC Guidelines for the diagnosis and management of syncope European Heart Journal, Volume 39, Issue 21, 01 June 2018, Pages 1883–1948
	4.	Shen W-K, Sheldon RS, Benditt DG, Cohen MI, Forman DE, Goldberger ZD, Grubb BP, Hamdan MH, Krahn AD, Link MS, Olshansky B, Raj SR, Sandhu RK, Sorajja D, Sun BC, Yancy CW. 2017 ACC/AHA/HRS guideline for the evaluation and management of patients with syncope: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines and the Heart Rhythm Society. <i>Circulation</i> . 2017;136:e60–e122. DOI: 10.1161/CIR.000000000000499.
	1.	NICE National Institute for Health and Clinical Excellence. Transient loss of consciousness ('Blackouts') Management in adults and young people. London: Royal College of Physicians (UK); 2010:11, 18, 20, 24.
2	2.	NICE National Institute for Health and Clinical Excellence. Clinical Guidelines, No. 109Transient loss of consciousness ('blackouts') in over 16s. London: 2014 Sep. ISBN-13: 978-1-4731-2287-1
4	3.	ESC Guidelines for the diagnosis and management of syncope European Heart Journal, Volume 39, Issue 21, 01 June 2018, Pages 1883–1948
	1.	ESC Guidelines for the diagnosis and management of syncope European Heart Journal, Volume 39, Issue 21, 01 June 2018, Pages 1883–1948
3	2.	NICE National Institute for Health and Clinical Excellence. Transient loss of consciousness ('Blackouts') Management in adults and young people. London: Royal College of Physicians (UK); 2010:11.
	3.	NICE National Institute for Health and Clinical Excellence. Clinical Guidelines, No. 109Transient loss of consciousness ('blackouts') in over 16s. London: 2014 Sep. ISBN-13: 978-1-4731-2287-1
	4.	Shen W-K, Sheldon RS, Benditt DG, Cohen MI, Forman DE, Goldberger ZD, Grubb BP, Hamdan MH, Krahn AD, Link MS, Olshansky B, Raj SR, Sandhu RK, Sorajja D, Sun BC, Yancy CW. 2017 ACC/AHA/HRS guideline for the evaluation and management of patients with syncope: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines and the Heart Rhythm Society. <i>Circulation</i> . 2017;136:e60–e122. DOI: 10.1161/CIR.000000000000499.
	1.	ESC Guidelines for the diagnosis and management of syncope European Heart Journal, Volume 39, Issue 21, 01 June 2018, Pages 1883–1948
	2.	Shen W-K, Sheldon RS, Benditt DG, Cohen MI, Forman DE, Goldberger ZD, Grubb BP, Hamdan MH, Krahn AD, Link
4		syncope: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines and the Heart Rhythm Society. <i>Circulation</i> . 2017;136:e60–e122. DOI: 10.1161/CIR.000000000000499.
	1.	ESC Guidelines for the diagnosis and management of syncope European Heart Journal, Volume 39, Issue 21, 01 June 2018, Pages 1883–1948
	2.	Shen W-K, Sheldon RS, Benditt DG, Cohen MI, Forman DE, Goldberger ZD, Grubb BP, Hamdan MH, Krahn AD, Link
5		MS, Olshansky B, Raj SR, Sandhu RK, Sorajja D, Sun BC, Yancy CW. 2017 ACC/AHA/HRS guideline for the evaluation and management of patients with syncope: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines and the Heart Rhythm Society. <i>Circulation</i> . 2017;136:e60–e122. DOI: 10.1161/CIR.000000000000499.

Slow Medicine, an Italian movement 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, Zadig www.choosingwiselyitaly.org; www.slowmedicine.it The Cochrane Neurological Sciences Field (CNF) is an entity of the Cochrane 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.

ttps://neurosciences.cochrane.org/