New Version 2009

ESSENTIAL MESSAGES FROM ESC GUIDELINES

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SYNCOPE

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EUROPEAN SOCIETY OF CARDIOLOGY®

ESC ESSENTIAL MESSAGES

ESC GUIDELINES FOR THE DIAGNOSIS AND MANAGEMENT OF SYNCOPE

Task Force for the Diagnosis and Management of Syncope of the European Society of Cardiology (ESC)
Developed in collaboration with the European Heart Rhythm Association (EHRA)[1],
the Heart Failure Association (HFA)[2] and the Heart Rhythm Society (HRS)[3]
Endorsed by the following societies: European Society of Emergency Medicine (EuSEM)[4],European Federation of Internal Medicine (EFIM)[5], European Union Geriatric Medicine Society (EUGMS)[6], American Geriatrics Society (AGS), European Neurological Society (ENS)[7], AmericanAutonomic Society (AAS)[8], European Federation of Autonomic Societies (EFAS)[9]

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ESC ESSENTIAL MESSAGES FROM ESC GUIDELINES FOR THE DIAGNOSIS AND MANAGEMENT OF SYNCOPE (NEW VERSION) 2009

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Take home messages

1. Syncope is a transient loss of consciousness (T-LOC) due to transient global cerebral hypoperfusion characterized by

- rapid onset,
- short duration, and
- spontaneous complete recovery.

2. Syncope can be classified as

- neurally-mediated (reflex syncope),
- secondary to orthostatic hypotension or
- secondary to cardiac causes.

3. Reflex syncope traditionally refers to a heterogeneous group of conditions in which cardiovascular reflexes that are normally useful in controlling the circulation become intermittently inappropriate, in response to a trigger.

4. Orthostatic intolerance syndromes are a common cause of syncope in elderly population, and are usually secondary to autonomic failure, to the use of vasodilator drugs or to volume depletion.

5. *Arrhythmias* are the most common cause of cardiac syncope, but structural cardiovascular disease can also cause syncope in some circumstances.

6. There is a **bimodal distribution** of patient age on presentation: in adolescents and young adults a reflex mechanism is the most common and above the age of 65 a cardiac cause or orthostatic hypotension should be suspected.

7. The **initial evaluation** after T-LOC consists of:

- a careful history,
- physical examination, including orthostatic blood pressure measurements
- and electrocardiogram (ECG).
- Based on these findings, simple additional examinations such as, carotid sinus massage, echocardiogram, ECG monitoring or orthostatic challenge can be indicated.

Take home messages

8. The initial evaluation can define the cause of syncope in 23-50% of patients and should answer **three key questions**:

- Is it a true syncopal episode or not?
- Has the aetiological diagnosis been determined?
- Are there findings suggestive of a high risk of cardiovascular events or death?

9. Increased cardiac risk may be indicated by:

- severe structural or coronary heart disease,
- syncope on exertion or supine,
- palpitations at the time of syncope,
- family history of sudden cardiac death or non sustained ventricular tachycardia,
- abnormal ECG (see full text).
- Patients with high risk criteria require prompt hospitalization or intensive evaluation.

10. In **low risk** patients the degree of investigation depends on the **frequency** of syncope and its impact on **quality of life**. In those low risk patients with T-LOC of unknown origin and frequent recurrences, either a strategy consisting on early implant of a loop recorder and wait for new T-LOC or to perform cardiac or neurally mediated tests, can be followed.

11. The principal **goals of treatment** for patients with syncope are to **prolong survival**, mainly by decreasing the risk of sudden cardiac death, **limit physical injuries**, and **prevent recurrences**. The importance and priority of these different goals depend on the cause of syncope.

12. Evaluation of T-LOC should ideally be performed by **Syncope Management Units**: The main objectives of such units are to provide state-of-the-art guideline-based assessment of symptomatic patients, in order to risk-stratify them, obtain an accurate aetiological diagnosis and assess prognosis.

Major gaps in evidence

1. The literature on syncope evaluation and treatment is largely composed of case series, cohort studies, or retrospective analyses of already existing data.

2. The impact of these approaches on guiding therapy and reducing syncope recurrences is difficult to discern without randomization and blinding. For some of the recommendations related to diagnostic processes, controlled trials have never been performed.

3. Consequently, some of these recommendations are based on brief observational studies, accepted clinical practice, expert consensus and sometimes common sense. In those cases, according to the current format of recommendations, a level of evidence C is given.

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The ESC Guidelines represent the views of the ESC which were arrived at after careful consideration of the available evidence at the time they were written. Health professionals are encouraged to take them fully into account when exercising their clinical judgment. The guidelines do not, however, override the individual responsibility of health professionals to make appropriate decisions in the circumstances of the individual patients, in consultation with that patient, and where appropriate and necessary the patient's guardian or carer. It is also the health professional's responsibility to verify the rules and regulations applicable to drugs and devices at the time of prescription.

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