

Blackout and collapse in older adults

Nicola Cooper

Abstract

'Collapse query cause' is a common acute medical presentation with many different causes. This article focuses on syncope, which is caused by transient global cerebral hypoperfusion. There are four main subtypes of syncope, with neurally mediated syncope and syncope caused by orthostatic hypotension being by far the most common. Cardiac arrhythmias account for only 20% of syncopal episodes. The initial evaluation is extremely important and leads to a diagnosis in 40% of cases. Only some patients need investigation, and deciding what investigations to request depends on the person's history, whether they have structural heart disease and whether the syncope is frequent or severe. The evaluation of syncope is often unstructured and varies considerably among doctors. The European Society of Cardiology guidelines on syncope remain the standard for syncope specialists.

Keywords Driving; eyewitness account; initial evaluation; neurally mediated; structural heart disease; syncope

The terms 'blackout' and 'collapse'

'Blackout' and 'collapse' are not diagnostic terms, but describe how patients present in the community or to hospital. The term 'collapse query cause' refers to an episode of transient loss of consciousness before a thorough evaluation has been made.

Causes of transient loss of consciousness

Transient loss of consciousness (TLOC), meaning that a patient has 'blacked out' and is back to normal again by the time they consult the doctor, is common and has many causes (Figure 1).

Acute illnesses can present with TLOC. The most common is infection, but acute coronary syndromes, bleeding, dissection of the aorta and pulmonary embolism can also present in this way. In older people, in whom atypical presentations are more common, TLOC may be the only presenting complaint, but there are always clues in the history, physical examination and initial test results that an acute illness is present. If this is the case, treat the underlying illness, not the 'collapse'.

After acute illness has been excluded, the main differential diagnoses of TLOC are syncope or seizure. However, other causes of non-syncopal attacks should be considered (Figure 1). In most cases, these can be ruled out by the history, physical examination and initial test results.

Nicola Cooper MB ChB FAcadMed FRCPE FRACP is a Consultant Physician and Honorary Clinical Associate Professor at Derby Teaching Hospitals NHS Foundation Trust, UK. Competing interests: none declared.

Key points

- Syncope is a common acute medical presentation among older people and can have serious consequences (e.g. hip fracture, disability)
- A thorough initial evaluation reveals a cause in 40% of patients
- The most common cause is neurally mediated syncope, often worsened by prescribed medications
- Recurrent syncope should be investigated, as further tests (e.g. carotid sinus massage, tilt-test, ambulatory electrocardiogram) find a cause in a further 50% of patients, who can be treated
- Driving advice should be given to all patients who present with transient loss of consciousness

This article focuses on syncope, which is one of the most common reasons for blackout or collapse presenting to acute medical services.

Syncope

The word 'syncope' is derived from the Greek words *syn* (meaning 'with') and *kopto* (meaning 'I cut' or 'I interrupt'). Syncope is always the result of transient global cerebral hypoperfusion.

Syncope is characterized by:

- relatively rapid onset
- loss of consciousness
- loss of voluntary muscle tone, usually leading to a fall
- spontaneous, complete and prompt recovery in most cases.

Syncope is a symptom, not a diagnosis. Figure 2 illustrates the four main types of syncope and their underlying causes.

The European Society of Cardiology (ESC) guidelines on syncope state, 'Patients are asymptomatic at the time of the evaluation, and the opportunity to capture a spontaneous event during a diagnostic test is rare. Diagnostic evaluation has focused on physiological states that could cause loss of consciousness ... in other words, the causal relationship between a diagnostic abnormality and syncope in a given patient is presumptive. Uncertainty is further compounded by the fact that there is a great deal of variation in how physicians take a history and perform a physical examination, the types of tests requested and how they are interpreted. These issues make the diagnostic evaluation of syncope inordinately difficult'.¹

Simple guidelines, described below, can make the evaluation of syncope easier.

Prevalence and impact on lifestyle

Syncope is one of the most common presentations to acute medical services and accounts for up to 5% of emergency

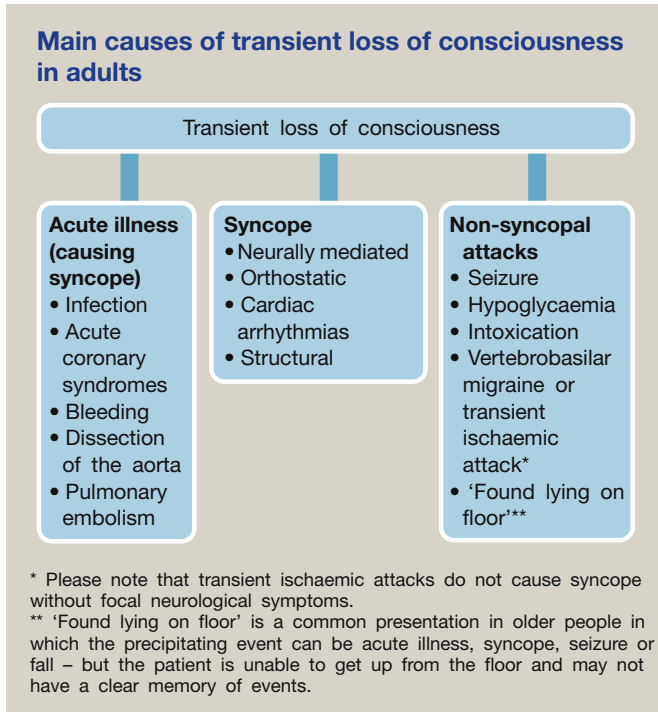


Figure 1

department visits. In the Framingham study, 10.5% of subjects reported at least one syncopal episode during the 17-year period of the study, but the prevalence increased considerably >70 years of age.² The incidence of syncope among older people is increasing in the UK, thought in part to be because of stricter monitoring and treatment of hypertension in the community.

The Italian Group for the Study of Syncope in the Elderly applied the diagnostic algorithm recommended by the ESC, outlined later, and found that the prevalence of neurally

mediated syncope in the elderly was 70%, and that of cardiac arrhythmias only 20%. A significant minority of syncope cases (10%) remain unexplained after a thorough evaluation.

Even though most causes of syncope are considered 'benign', syncope can impact considerably on people's lives. Older people with syncope are more likely to injure themselves when they fall and reduce their 'life space' as a result of loss of confidence. There is a marked negative relationship between the frequency of syncopal attacks and the perception of health. Syncope can also be a marker of frailty in older people. Unless it is vasovagal, syncope is related to reduced survival, and only half of patients aged >85 years who have been hospitalized with syncope survive >3 years.³

Initial evaluation

Syncope is diagnosed on the basis of history – from the patient and an eyewitness whenever possible. An eyewitness account in cases of collapse is vital, as retrograde amnesia for even having lost consciousness is common in syncope, and it is simply not possible to differentiate syncope from a seizure in the absence of an eyewitness account.

Table 1 outlines important questions to be asked, and Table 2 outlines the key features that differentiate syncope from seizures. Once a decision has been made that the event was syncopal, the history and physical examination alone identify a potential cause of syncope in 40% of patients. Only some patients need further investigation.

In syncope, the initial evaluation consists of:

- history (including from an eyewitness)
- physical examination (focusing on the heart and neurological system)
- lying and standing blood pressure
- 12-lead electrocardiogram (ECG).

Structural heart disease is the most important predictor of a cardiac cause of syncope and should be sought. The absence of

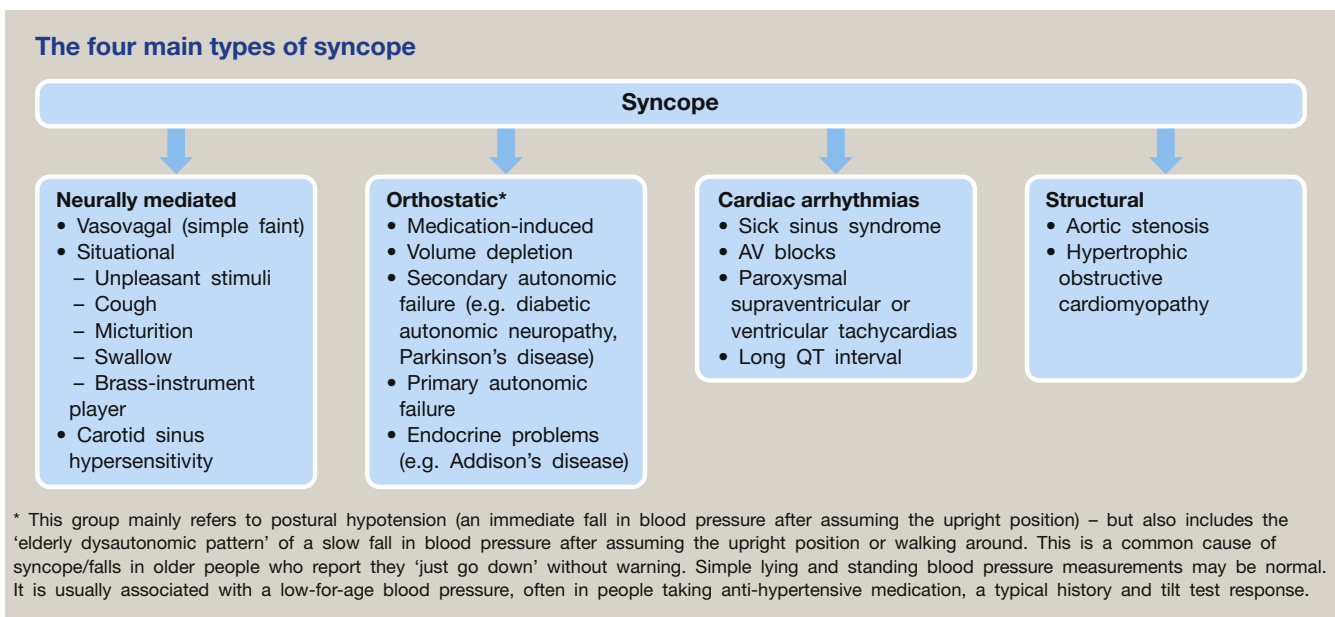


Figure 2

Download English Version:

<https://daneshyari.com/en/article/5681145>

Download Persian Version:

<https://daneshyari.com/article/5681145>

[Daneshyari.com](https://daneshyari.com)