

Fits, faints and funny turns



Fits, faints and funny turns represent a common reason for presentation – either to the general practitioner or to the emergency department. In many cases, the consultation is dissatisfying for the doctor and the patient, as such patients frequently present a diagnostic dilemma for the clinician. Frequently, the key to a satisfactory evaluation is a structured approach, premised on a clear and comprehensive history focused on prior comorbidities and the episode – its context, precipitating factors, prior situational factors, onset and evolution, and events occurring afterwards. A detailed and carefully elicited medical history allows the clinician to confirm the diagnosis, delineate the underlying mechanism, and identify features that may suggest high risk of recurrence, injury or death.

This issue of CME includes a series of articles on approaches to common causes of fits, faints and funny turns in adults (Table 1). The

Table 1. Common causes of fits, faints and funny turns in adults

Epilepsy
Tonic, clonic, atonic seizures
Focal seizures with impaired awareness or secondary generalisation
Primary absence seizures
Generalised tonic-clonic seizures
Cardiac disease
Cardiomyopathy (HCM, ARVC)
Channelopathies (Brugada, CPVT, LQTS, SQTs)
Conduction abnormalities (2nd-, 3rd- and high-degree AV block)
Arrhythmias
Valvular heart disease (AS, MS)
Pericardial disease
Postural hypotension
Vasovagal/syncope
Carotid sinus hypersensitivity
Falls
Migraine variants
Vertigo
BPPV
Vestibular neuritis
Cerebellar stroke
Vestibular migraine
Ménière's disease
Drug reaction
Metabolic causes
Hypoglycaemia
Electrolyte abnormalities
Anaemia
Transient ischaemic attacks
Amnesic episodes
Cervical spondylosis
Sleep disorders
Sleep apnoea
Narcolepsy/cataplexy
Autonomic failure

Continued ...

Table 1. (continued) Common causes of fits, faints and funny turns in adults

Psychogenic
Conversion reactions
Fugue states
Malingering
Personality disorders
Phobia/anxiety states
Psychoses/severe depression
Cultural/language conflicts
Hyperventilation
Drugs
Alcohol
Peripheral vasodilators (angiotensin-converting enzyme inhibitors, angiotensin II receptor blockers, glyceryl nitrate, hydralazine, prazosin)
Diuretics
Anti-epileptic drugs
Antihypertensive drugs
Barbiturates
Benzodiazepines
Phenothiazines
Phenoxybenzamine
Selective serotonin re-uptake inhibitors
Tricyclic antidepressants
OTC anticholinergic agents

ARVC = arrhythmogenic right ventricular cardiomyopathy; AS = aortic stenosis; AV = atrioventricular; BPPV = benign paroxysmal positional vertigo; CPVT = catecholaminergic paroxysmal ventricular tachycardia; HCM = hypertrophic cardiomyopathy; LQTS = long QT syndrome; MS = mitral stenosis; OTC = over the counter; SQTs = short QT syndrome.

four articles emphasise the underlying mechanisms for such episodes and provide the busy clinician with a sound and simplified approach to the clinical evaluation and management.

In the first article, by Ntusi *et al.*^[1] the pathophysiology of and clinical approach to syncope are reviewed. The classification, which is based on the underlying pathophysiological mechanism causing the event, includes cardiac, orthostatic and reflex (neurally mediated) mechanisms. The prognosis of syncope relates to: (i) the risk of death and life-threatening events; and (ii) the risk of recurrence of the syncope and physical injury. The history is key to the assessment of the patient with syncope. The routine use of a broad panel of laboratory tests is not recommended and tests should only be requested if clinically indicated; however, an ECG should be performed in all patients. The goals of management are to prolong survival, limit physical injuries and prevent recurrences. Patients with life-threatening causes of syncope should be managed urgently and appropriately.

In the second article, Lee-Pan and Tucker^[2] provide a comprehensive review of epilepsy in adults and introduce the reader to an updated classification of epilepsy. A Generalised seizure indicates a disorder in which the entire cortex instantly becomes epileptiform in nature, and may be classified as Absence or Generalised Tonic-Clonic Seizure (GTCS). Focal seizures may occur with retained or altered awareness, or evolve secondarily into a GTCS. While not always easy, it is fundamentally important to differentiate Generalised from Focal seizures, as the two have a different aetiology and pathophysiology,

and the approach to management differs. A simplified schema for remembering different seizure types is provided, and a clinically useful A->B->C mnemonic is recommended for patients and medical staff.

In the third article, by Bateman *et al.*,^[3] acute vertigo is discussed. Vertigo is usually benign and caused by peripheral vestibular disease. It is important to make a specific diagnosis, and the history should answer three questions: (i) Is it vertigo? (ii) Is the lesion central or peripheral? (iii) Does the patient require neuro-imaging? The different causes of acute vertigo and their management are considered in detail, including benign paroxysmal positional vertigo, vestibular neuritis, cerebellar stroke, vestibular migraine and Ménière's disease. Vestibular rehabilitation therapy may substantially improve the functioning of patients with vertigo, whereas long-term vestibular suppressants are likely to impede recovery.

In the last article, by De Villiers and Kalula,^[4] falls and balance problems in the elderly are revisited. Gait instability and falls are common in elderly persons and have devastating consequences, with substantial morbidity and mortality, and are a significant precipitant for functional decline. The causes of falls in elderly persons are usually multifactorial, with a combination of intrinsic factors, including physiological changes of ageing, frailty and pathologies, and extrinsic, environmental and situational factors. Maintaining postural control requires a complex integration of sensory input, central processing, motor co-ordination and musculoskeletal function, which decrease with ageing. The assessment and management of a patient who is at risk of falls or who has fallen require a multidisciplinary approach to identify and address factors contributing to the falls. The success of interventions to treat and manage these problems can be gauged by improvements in functional status. Prevention of falls focuses on

maintaining mobility and balance and identifying those at risk of a fall for multidisciplinary assessment and intervention.

In conclusion, the patient presenting with a problem of a faint, fit or funny turn may present a diagnostic challenge for the busy general practitioner or junior (and often overwhelmed) emergency department doctor. A clear history is crucial for a thorough evaluation. It is my hope that this series of articles will improve not only the understanding of busy general practitioners, medical officers and emergency medicine doctors, but also decrease levels of anxiety among patients with such problems, who often feel frustrated that neither a cause nor a satisfactory explanation can be found for their problem to allay their fears.

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3. Bateman K, Rogers C, Meyer E. An approach to acute vertigo. *S Afr Med J* 2015;105(8):694. [<http://dx.doi.org/10.7196/SAMJnew.8097>]
4. De Villiers L, Kalula SZ. An approach to balance problems and falls in elderly persons. *S Afr Med J* 2015;105(8):695. [<http://dx.doi.org/10.7196/SAMJnew.8037>]

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