

Risk stratifications of cardiac syncope

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Syncope is defined as a transient loss of consciousness due to transient global cerebral hypoperfusion characterized by rapid onset, short duration and spontaneous recovery. Based on the pathophysiology, syncope can be classified as (1) reflex (neurally-mediated) syncope, (2) syncope due to orthostatic hypotension, and (3) cardiac syncope. Syncope is common in general population and the first episode presents at characteristic ages. There is very high prevalence of first faints in patients between 10 and 30 years, with a peak of 47% in females and 31% in males around the age of 15 and reflex syncope is the most common cause. In the Framingham study, the incidence of syncope shows a sharp rise after the age of 70 years, from 5.7 events per 1000 person-year in men aged 60-69, to 11.1 in men age 70-79. There are many score systems to classify risks of syncope, including S. Francisco syncope rule, OESIL score and EGSYS score. In general, structural heart disease and primary electrical disease are major risks for sudden cardiac death and overall mortality in patients with syncope. Young patients without structural heart diseases and electrical heart diseases have an excellent prognosis. Morbidity is particularly high in the elderly and ranges from loss of confidence, depressive illness and fear of falling, to fractures and subsequent institutionalization.