

Coronary arterial vessels in relation to sudden cardiac death.

Abstract:

OBJECTIVE: To review literature on the coronary vascular factors related to the syndrome of sudden cardiac death. **DATA SOURCE/SYNTHESIS:** Major published articles and case reports on the nature of sudden cardiac death were searched electronically (Medline, Internet) and through hand scanning. Comparison of the different studies with regard to common themes was undertaken and consensus opinions highlighted. **RESULTS:** The aetiology of sudden cardiac death is diverse. Many conditions, hitherto considered benign, including coronary arterial anomalies and muscle bridges have been shown to cause sudden cardiac death. Coronary atherosclerosis, hypoplastic coronary vessels, coronary artery dissections are the commoner causes. The role of coronary arterial thrombi is controversial. The protective role of exercise is seriously questioned by the many reports of sudden cardiac death in long distance runners. **CONCLUSION:** Cases of sudden cardiac death are increasingly being reported. As a minimum, autopsy worksheets for cases of sudden death should include atherosclerosis, congenital coronary anomalies, tunneling of coronary vessels and hypoplastic vessels in addition to valvular and myocardial disorders.