

**Table 3. Factors associated with spontaneous MI with coronary occlusion and/or oxygen supply/demand imbalance**

**Factors associated with atherosclerosis (33, 34):**

- Older age (>75 years)
- Diabetes mellitus
- Hypertension
- Hypercholesterolaemia
- Obesity
- Smoking
- Family history of premature ASCVD (males, age <55 years; females, age <65 years)

**Selected additional risk factors for atherosclerosis (for full details refer to [www.cvdcheck.org.au](http://www.cvdcheck.org.au)) (34):**

- Chronic inflammatory conditions, such as psoriasis, rheumatoid arthritis, lupus or systemic sclerosis
- Familial hypercholesterolaemia (FH) confirmed by genetic testing
- Chronic kidney disease (eGFR 15–59 mL/min/1.73 m<sup>2</sup> with or without albuminuria; not treated with dialysis or kidney transplantation)
- Severe mental illness (defined as current or recent mental health conditions requiring specialist treatment, whether received or not, in the 5 years prior to risk assessment)
- Ethnicity (e.g. South Asian or First Nations ancestry)
- History of premature or early menopause (before age 40 years)
- History of pregnancy-associated conditions that increase later ASCVD risk, such as hypertensive disorders of pregnancy (such as pre-eclampsia) and gestational diabetes
- Polygenic risk score indicating higher risk for atherosclerosis
- COVID-19 (historical or current infection)

**Factors associated with SCAD (35):**

- Female
- Younger age (<50 years)
- Lack of cardiovascular risk factors
- Pregnancy or postpartum
- Fibromuscular dysplasia
- Inherited connective tissue disorders

**Factors associated with coronary embolism (36):**

- Aortic or mitral valve, left atrial appendage or left ventricle thrombus, vegetation or neoplasm
- Patent foramen ovale, atrial septal defect or pulmonary arteriovenous malformation with a venous source (e.g. deep vein thrombosis)
- Atrial fibrillation without adequate anticoagulation

**Factors associated with coronary vasospasm (37–39):**

- Smoking
- Older age (>75 years)
- Allergy
- Chemotherapy (5-fluorouracil)
- Some illicit drugs (cocaine, methamphetamine)

**Factors associated with coronary microvascular dysfunction (40):**

- Female sex (especially post-menopausal)
- Atherosclerotic disease
- Chronic inflammation (e.g. systemic lupus erythematosus, rheumatoid arthritis)
- Myocardial diseases
- Hypertrophic cardiomyopathy
- Dilated cardiomyopathy
- Anderson–Fabry disease
- Amyloidosis
- Myocarditis
- Aortic stenosis

**Factors associated with oxygen supply/demand imbalance (+/- atherosclerosis) (1):**

- Severe anaemia
- Hypotension/shock
- Sustained tachycardia or tachyarrhythmia
- Sustained bradycardia or bradyarrhythmia
- Respiratory failure
- Sepsis
- Pulmonary embolism
- Critical illness

Note: Takotsubo cardiomyopathy is not classified as MI and is not discussed in this guideline.

Abbreviations: AIDS, acquired immunodeficiency syndrome; ASCVD, atherosclerotic cardiovascular disease; eGFR, estimated glomerular filtration rate; HIV, human immunodeficiency virus; MI, myocardial infarction; SCAD, spontaneous coronary artery dissection.