

Inherited Cardiovascular Conditions in BC - Background Information

Estimated to affect 80,000-120,000 patients in BC

Familial Hypercholesterolemia

- Most common monogenic disorder causing premature atherosclerotic cardiovascular disease
- The risk of disease in patients with confirmed FH is 10- to 20-fold that of a normolipidemic individual
- Early initiation of aggressive treatment in youth/young can normalize life expectancy
- 1 in 250

Heritable Aortopathies

- Conditions that affect the size of the aorta and make it vulnerable to aneurysms and rupture; may also affect other systems of the body
- Includes: Marfan syndrome, Loeys-Dietz syndrome, vascular Ehlers-Danlos syndrome, and familial thoracic aortic aneurysm and dissection
- 1 in 2000 (Marfans) to rare (TAAD)



Hypertrophic Cardiomyopathy

- Most common genetic heart disease,
- 1 in 500
- Characterized by thickening of the heart muscle, which can impede blood flow or pump efficiency
- Often begins in adolescence or young adulthood
- Exercise is a known trigger for sudden death in HCM patients

Brugada Syndrome

- Condition causes disruption of heart rhythm
- Signs and symptoms, including sudden death, can occur from early infancy to late adulthood
- Sudden death typically occurs around age 40
- This condition may explain some cases of sudden infant death syndrome (SIDS)
- 1 in 2000



Dilated Cardiomyopathy

- Heart's ability to pump blood is decreased because the ventricle is stretched and thinned
- Often leads to heart failure, heart valve problems, blood clots and/or arrhythmias
- Often presents in 20-60 years of age

ARVC

- Disorder of the muscular wall of the heart, causing it to break down over time
- Increased risk of an abnormal heartbeat (arrhythmia) and sudden death
- May not cause any symptoms in its early stages but individuals may still be at risk of sudden death, especially during strenuous exercise
- 1 in 2000



Long QT Syndrome

- Heart rhythm condition that can potentially cause fast, chaotic heartbeats and can trigger a sudden fainting spell, seizure, or sudden death
- 1 in 2000
- Treatment strategies include drug therapy, lifestyle modification and avoidance of common medications

CPVT

- Rare condition (1 in 10,000) characterized by an abnormal heart rhythm; as the heart rate increases in response to physical activity or emotional stress, it can trigger an abnormally fast and irregular heartbeat called ventricular tachycardia
- Can lead to cardiac arrest and sudden death
- Often begins in childhood



<15%
of BC patients have
access to
specialized ICC
care today