

Introduction: Heart Disease

Heart disease refers to what is really a group of conditions that affect the structure and functions of the heart and has many root causes. Heart diseases can be grouped together according to how they affect the structure or function of your heart.

- **Coronary artery and vascular diseases** are due to hardening of the arteries (atherosclerosis), causing arteries to be narrowed or blocked which can result in heart attacks and angina.
- **Heart rhythm disorders (arrhythmias)** disrupt blood flow.
- **Structural heart disease** refers to abnormalities of the heart's structure, including the valves, walls, muscles or blood vessels near the heart.
- **Heart failure** is a serious condition that develops after the heart becomes damaged or weakened by heart attack and high blood pressure.
- Other heart diseases include infections, enlarged heart muscles and inherited disorders.

Causes ⁽¹⁾

Heart disease can be caused by:

- Medical conditions
 - High blood pressure
 - High cholesterol levels
 - Diabetes
 - Sleep apnea
- Lifestyle risk factors
 - Unhealthy diet
 - Not enough physical activity
 - Unhealthy weight
 - Smoking (tobacco misuse)
 - Substance Abuse
 - Stress
 - Recreational drug use
 - Hormone replacement therapy
- Non-modifiable risk factors
 - Sex – a woman's risk of heart disease and stroke changes over her lifetime
 - Age – the older you are, the higher your risk of heart disease
 - Family and medical history
 - South Asian, African or Indigenous heritage
 - Personal circumstances, including access to healthy food, safe drinking water, health services and social services

Prevention

To diagnose heart disease conduct:

- Medical and family history
- Complete physical exam
- Bloodwork: order or review cholesterol levels, C-reactive protein, Lipoprotein (a), Plasma ceramides and Natriuretic peptides ⁽²⁾
- Angiogram
- Cardiac catheterization
- Doppler ultrasound
- Echocardiogram
- Electrocardiogram
- Holter or event monitoring

Treatment

Treatment for heart disease includes:

- Medication: each heart problem requires specific medication for that problem.
- Lifestyle changes (healthy eating, staying active, reducing stress) and surgery or other procedures.

Treatment depends on the type and severity of the individuals' heart disease. The person and their doctor will discuss the treatment options and decide which is best for them and their circumstances.

Recovery

Cardiac rehabilitation is a personalised program of exercise, education and counselling for recovery from heart disease.

References

1. Heart & Stroke Foundation. (2018). Home page. Retrieved March 4, 2020, from <http://www.heartandstroke.com/site/c.ikiQLcMWJtE/b.2796497/k.BF8B/Home.htm>
2. Mayo Clinic. (2019). Blood Tests for Heart Disease. Retrieved March 4, 2020, from <https://www.mayoclinic.org/diseases-conditions/heart-disease/in-depth/heart-disease/art-20049357>

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