# Myocardial Infarction Registry

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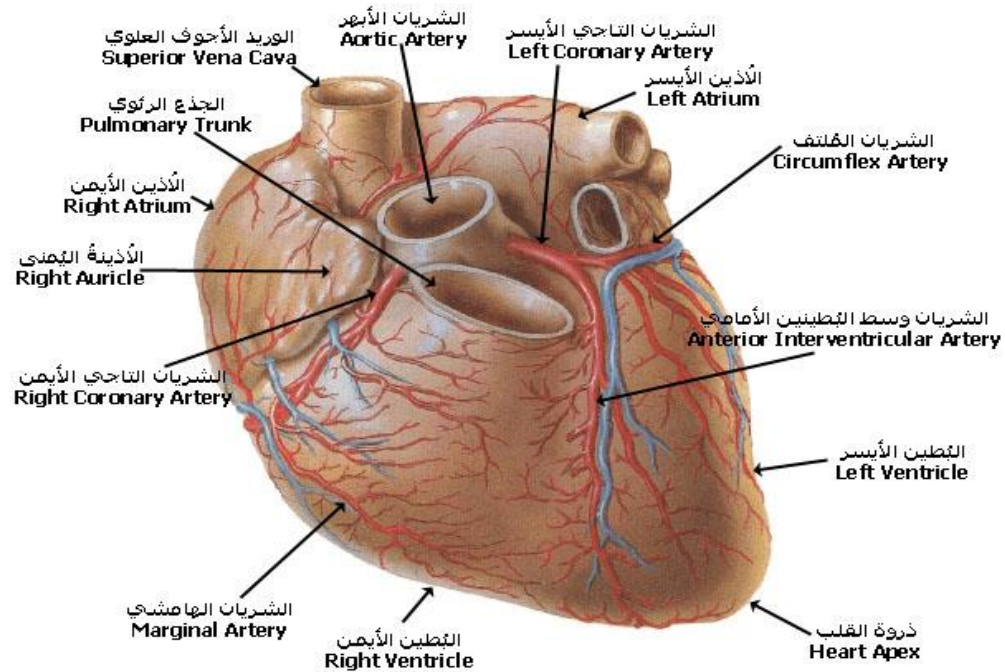- Myocardial Infarction Registry

# Myocardial Infarction

- **Myocardial infarction (MI)** (ie, heart attack) is the irreversible death (necrosis) of heart muscle secondary to prolonged lack of oxygen supply (ischemia). ( A Maziar Zafari)

- **Myocardial infarction** (**MI**), commonly known as a **heart attack**, occurs when blood flow decreases or stops to a part of the heart, causing damage to the heart muscle.(National Heart, Lung, and Blood Institute (NHLBI) )

# Signs and symptoms

- Fatigue, Malaise.

-  Chest discomfort (chest pain) which may travel into the shoulder, arm, back, neck, or jaw. the pain may occur in the center of the left side of the chest. The pain may feel like heartburn.

- Shortness of breath, nausea, feeling faint, a cold sweat, or feeling tired.

# Causes and Risk Factors

- Most MIs occur due to coronary artery disease. (NHLBI)

# Causes and Risk Factors

- The heart requires supply of oxygen and nutrients like any other muscle in the body. if one of the supply (coronary arteries that deliver oxygenated blood to the heart muscle ) becomes blocked suddenly, a portion of the heart is starved of oxygen, a condition called "cardiac ischemia" . If cardiac ischemia lasts too long, the starved heart tissue dies. This is called a heart attack (myocardial infarction) -- literally, "death of heart muscle". (WebMD)

# Causes and Risk Factors

- Risk factors include <u>high blood pressure</u>, <u>smoking</u>, <u>diabetes</u>, <u>lack of exercise</u>, <u>obesity</u>, <u>high blood cholesterol</u>, <u>poor diet</u>, and <u>excessive alcohol intake</u>, and <u>others</u>.

# Diagnoses Tests for MI

- A number of tests are useful to help with diagnosis, including <u>electrocardiograms (ECGs)</u>, <u>blood tests</u>, and <u>coronary angiography</u>

# Treatment

- treatments attempt to restore blood flow to the heart, and include percutaneous coronary intervention (PCI), where the arteries are pushed open and may be stented, or thrombolysis, where the blockage is removed using medications. ( European Society for Cardiology ESC)

# Myocardial Infarction Registry

| | A | B | C | D | E | F | G | H | I | J | K |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | Myocardial Infarction | |
| 2 | Health facility ID | Patient National ID No. | Date | Age | Gender | Country | City | Family history | ECG | Prior treatment | Diabetes |
| 3 | H1 | 11997 | | 19 | M | | | Positive | Positive | No | yes |
| 4 | H2 | 21996 | | 22 | F | | | Negative | Positive | No | No |
| 5 | L1 | 21964 | | 54 | F | | | Negative | Positive | Yes | No |
| 6 | L2 | 11948 | | 70 | M | | | Positive | Positive | Yes | Yes |
| 7 | Cl1 | 11956 | | 62 | M | | | Positive | Positive | Yes | Yes |

| K | L | M | N | O | P | Q | R | S |
|---|---|---|---|---|---|---|---|---|
| Diabetes | Smoking | Hypertension | Obesity | Hyperlipidemia | Hypertriglyceridemia>=150 | HDL<40 | LDL>200 | Regular Exercise |
| yes | No | Yes | No | Yes | 150 | 40 | 200 | No |
| No | Yes | No | Yes | Yes | 130 | 30 | 205 | No |
| No | Yes | Yes | Yes | Yes | 250 | 50 | 200 | No |
| Yes | No | No | Yes | No | 100 | 60 | 210 | Yes |
| Yes | Yes | Yes | No | Yes | 110 | 66 | 196 | Yes |