



وزارة الصحة العامة
Ministry of Public Health
دولة قطر • State of Qatar



المبادئ الإرشادية السريرية لدولة قطر
NATIONAL CLINICAL GUIDELINES FOR QATAR

Information for Patients & Caregivers

What You Need to Know About Acute Coronary Syndrome

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Do you know that your heart needs its supply of blood, oxygen, and nutrients to be able to pump blood around your body?

Your heart gets its blood supply from the arteries, called **Coronary Arteries** located on the surface of your heart.

WHAT IS ACUTE CORONARY SYNDROME?

Acute Coronary Syndrome is a medical emergency in which the blood supply to the heart muscle suddenly becomes blocked.

There are two main types of Acute Coronary Syndrome:

- **Unstable angina.**
- **Heart attack** (myocardial infarction).

Both occur due to a blood clot that forms within a coronary artery.

Unstable angina occurs when the blood clot causes a sudden reduction in blood flow but not a total blockage. In this case, the heart muscle is not damaged.

A **heart attack** occurs when a coronary artery suddenly becomes completely blocked by a clot. This stops blood flow to the heart muscle, resulting in irreversible damage to the heart muscle.

Common symptoms of acute coronary syndrome include:

- **Pain, discomfort, or tightness** in the chest.
- **Pain or discomfort** in the arms, the jaw, neck, back or stomach.
- **Shortness of breath.**
- **Feeling dizzy or lightheaded.**
- **Nausea.**
- **Sweating.**

If you develop chest pain, stop what you are doing, sit down and rest. If your chest pain does not resolve with a few minutes, call 999 immediately.

WHAT LEADS TO ACUTE CORONARY SYNDROME?

Factors that may increase your risk of developing Acute Coronary Syndrome, include:

- **Older age.**
- **Smoking.**
- **High blood pressure.**
- **High blood cholesterol level.**
- **Overweight or obesity.**
- **Diabetes.**
- **Physical inactivity.**
- **A family history** of heart disease or stroke.

Your doctor will help you understand your risk and what you can do about it.



WHEN SHOULD I SEE A DOCTOR?

You should see a doctor as soon as possible if:

- You have frequent episodes of pain or discomfort in the chest, arms, jaw, and neck.
- Your symptoms happen with little exercise or while you are resting.

If you are a known angina patient and you experience an episode that does not resolve within a few minutes of taking your prescribed medicines, Call 999 immediately.

It may be difficult to tell the difference between chest pain from the heart, or chest pain from other causes. See your doctor to have it checked.

WHAT THE DOCTOR WILL DO

Emergency Care: Once you arrive at the hospital, you will be assessed immediately by the doctors in the Emergency Department (ED).

To identify the cause of your sudden illness, the ED doctor will ask questions about your symptoms, when they started and your lifestyle habits. The doctor will examine you for signs of the possible underlying cause.

If your symptoms and signs suggest an acute coronary syndrome, the doctor may order some urgent tests. Tests commonly ordered include:

- **ECG** (electrocardiogram).
- **Blood tests.** To help determine if damage to the heart muscle has occurred.

If the tests confirm blood flow to the heart has been blocked, the doctors will start treatment immediately. You will be admitted to the hospital for specialist care.



TREATMENT

The aims of treatment for the acute coronary syndrome are to:

- Reduce the workload of the heart muscle.
- Unblock the coronary arteries to limit the extent of heart muscle damage.

The treatment usually varies between cases and whether you have a heart attack or unstable angina. Treatment will also vary depending on your situation and your risk of having further problems.

The main treatments for Acute Coronary Syndrome include:

Medications: You may receive a combination of any of the following medicines:

- **Pain-relief medicines:** The most common are *opioids* given as injections into the vein to immediately relieve pain and reduce pressure on your heart.
- **‘Blood thinner’ medicines:** Examples include aspirin and clopidogrel. They help to stop clots from forming.
- **‘Clot-bursting’ medicines:** These are used to break up blood clots if you arrive at the hospital within a few hours of the first symptoms.
- **Medicines for reducing the workload of the heart.** Examples include *bisoprolol* and *glyceryl trinitrate*.
- **Medicines for controlling your blood cholesterol level.** The most commonly used types are called *statins*.
- **Medicines to control any underlying disease** such as high blood pressure or diabetes.

Surgery: Sometimes, doctors may recommend an urgent procedure known as angioplasty to re-open the blocked artery.



FOLLOW UP

If you have already developed heart disease or you are started on medication to control the risk of developing one, seek to see a doctor regularly for check-ups and follow-up treatments.

Regular check-ups will allow your doctor to monitor your health and adjust your medications to prevent side effects. It also provides an opportunity for health counselling on lifestyle changes.

PREVENTION

You can reduce your risk of having a heart attack in the future by controlling any health conditions you may have and making healthy choices such as:

- **Stop smoking if you smoke** as this will worsen your condition.
- **Eat healthy diets** such as foods low in cholesterol, saturated fats, and salt.
- **Maintain a healthy weight.**
- **Exercise regularly** for at least two and a half hours each week at a moderate intensity. Check with your doctor before starting exercise.
- **Control your medical conditions** by taking your prescribed medicines regularly.

ADDITIONAL INFORMATION

Additional information on Acute Coronary Syndrome can be found in the National Clinical Guideline published by The Ministry of Public Health (MoPH) Qatar.

The guideline is available to the public from the MoPH website: www.moph.gov.qa

