

## ASSOCIATION OF SERUM ELECTROLYTE CHANGES WITH ACUTE CORONARY SYNDROME: A NARRATIVE REVIEW

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Received on : 17-10-2024

Accepted on : 13-12-2024

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### ABSTRACT

This review article looks at the function of serum electrolytes in acute coronary syndrome (ACS) and how they affect the course of treatment for patients. The goal is to comprehend how abnormalities in major electrolytes, including as potassium, sodium, calcium, and magnesium, impact heart function and raise the risk of death and morbidity in individuals with ACS. This study aims to evaluate the electrolyte abnormalities in ACS, as well as their clinical importance. The process include a thorough analysis of previous research, with an emphasis on data gleaned from several sources using specific search phrases associated with serum electrolytes and ACS. With an emphasis on the results of correctional treatments, the study assesses the relationship between electrolyte levels and clinical outcomes. The findings show that increased rates of death and morbidity are associated with electrolyte abnormalities, which are frequent in ACS. In order to enhance patient outcomes, these imbalances must be properly managed. To sum up, prompt electrolyte monitoring and correction are essential for improving survival and lowering complications in individuals suffering from acute coronary syndrome.

**KEYWORDS:** Acute Coronary Syndrome, Clinical Correlation, Electrolytes, Electrolyte Imbalance, Myocardial Infarction.

### INTRODUCTION

"Acute coronary syndrome" describes a cluster of medical conditions marked by sudden reduction in blood flow to the heart. A heart attack and unstable angina are the terms used to describe these conditions (1). A heart attack happens when cells in the heart tissue die or get damaged. Myocardial infarction is another term for a heart attack. Stable angina may develop if there is a decrease in blood flow to the heart (2), there won't be any cardiac arrest or cell death as a consequence. On the other hand, risk of a heart attack may increase due to the reduced blood flow. Symptoms of acute coronary syndrome may range from mild discomfort to severe chest pain (3). Patient need to be evaluated and treated right away since it is a medical emergency. Early diagnosis and efficient treatment planning aims to improve cardiac blood flow, manage ischaemic injury, and prevent secondary complications.

ACS symptoms often appear all at once. Among them are:

- Chest pain or discomfort. Common symptoms include heat, constriction, pain, or pressure. Chest pain is also known as angina.
- Chest pain that spreads to other parts of the body. The areas that fall under this category include the back, neck, jaw, upper belly, shoulders, and arms.
- Queasy or throw up.
- Indigestion.
- Dyspnea, a medical term for shortness of breath.
- Abrupt, profuse perspiration.
- An irregular heartbeat.
- Having vertigo or light-headedness.
- Passing out.
- Atypical exhaustion.

Pain or stiffness in the chest is the most common sign,