

Clinical Utility of Serum Copeptin in Patients with Acute Coronary Syndrome

Thesis

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By

Lubna Ezz Eldin Mohamed Fouda

M.B.B.Ch.,

Faculty of Medicine - Ain Shams University

Under supervision of

Professor/ Manal Abd El Baky Mahmoud

Professor of Clinical and Chemical Pathology

Faculty of Medicine -Ain Shams University

Doctor / Menat Allah Ali Shaaban

Lecturer of Clinical and Chemical Pathology

Faculty of Medicine -Ain Shams University

Faculty of Medicine

Ain Shams University

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

لسببائك لا علم لنا
إلا ما علمتنا إنك أنت
العليم العظيم

صدق الله العظيم

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*✍ **Lubna Ezz Eldin Mohamed***

Abstract

(1) The introduction of a novel immunoassay measuring Copeptin, the c-terminal part of the vasopressin prohormone provided a unique window in common medical disorder. We examined the ability of Copeptin in combination with cardiac troponin-I (cTn-I) in diagnosis of AMI, the differentiation between AMI and UA and finally evaluate the ability of Copeptin in enhancing sensitivity of cTn-I at early hours of admission in emergency department.

(2) This study was carried on 50 subjects; they were divided into 25 patients with AMI and 15 patients with UA in addition to 10 healthy subjects serving as healthy control. Concentrations of Copeptin, cTn-I and CK-MB were determined in their sera.

(3) In AMI group, the mean serum level of Copeptin was highly significant in three hours than six hours from admission time. The mean serum level of cTn-I was highly significant in six hours than three hours. The sensitivity and specificity of Copeptin were 100% and 100% at 3 hours from the admission time versus 92% and 46.67% with cTn-I. The AUC of the combination of Copeptin was 1 which was significantly higher than the AUC of cTn-I 0.669.

(4) Copeptin as a single marker has diagnostic value being superior to cTn-I within the first three hours after acute chest pain but still single Copeptin determination is unable to displace or challenge a serial cTnI measurement to detect myocardial necrosis within a rule in approach.

الأهمية الإكلينيكية للكوبيبتين فى المصل لدى
مرضى متلازمة الشريان التاجي الحادة

رسالة

توطئة للحصول على درجة الماجستير فى
الباثولوجيا الإكلينيكية والكيميائية

مقدمة من

الطبيبة / لبنى عز الدين محمد فوده

بكالوريوس الطب والجراحة

كلية الطب - جامعة عين شمس

تحت إشراف

الاستاذة الدكتورة / منال عبد الباقي محمود

استاذ الباثولوجيا الإكلينيكية والكيميائية

كلية الطب - جامعة عين شمس

الدكتورة / منة الله على شعبان

مدرس الباثولوجيا الإكلينيكية والكيميائية

كلية الطب - جامعة عين شمس

كلية الطب
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Introduction





Aim of the Work





Review of literature





Chapter (1)

Acute coronary syndrome





Chapter (2)

Copeptin





Subjects and Methods





Results





Discussion





Summary & Conclusion





Recommendations

