

# **Role of Long Non-Coding RNA CDKN2B-AS1 and Homocysteine in Patients with Ischemic Cardiomyopathy.**

## **ABSTRACT**

**Background:** Ischemic cardiomyopathy (ICM) refers to significantly impaired function of left ventricle that is caused by coronary artery disease. The aim of this study is to assess the levels of lnc-RNA-CDKN2B-AS1 and homocysteine in patients with ischemic cardiomyopathy and compare with patients with non ischemic cardiomyopathy.

**Methods:** The present study was conducted on 86 patients with cardiomyopathy divided into 2 groups: Group I; 56 patients with post-ischemic cardiomyopathy (47 males and 9 Females) and Group II; 30 patients with non ischemic dilated cardiomyopathy (23 males and 7 females). Serum was separated for detection of homocysteine by ELISA and lnc-RNA-CDKN2B-AS1 by qRT-PCR.

**Results:** There was significant increase of serum lnc-RNA-CDKN2B-AS1 in the ischemic group compared with non- ischemic group. Serum Homocysteine level was high in the ischemic group than non- ischemic group but P-value was not significant.

**Conclusion:** Lnc-RNA-CDKN2B-AS1 has a strong potential to act as a biomarker for diagnosis of ischemic cardiomyopathy providing potential new strategies for early screening and treatment of ischemic cardiomyopathy. As regard homocysteine, we need more research to establish it as a risk factor for ischemic cardiomyopathy and this is definitely important for the purpose of strong evidence.