

Effect of colchicine on Neutrophil to Lymphocyte ratio and Cardiac Function in Non-Diabetic Patients Post STEMI Using Speckle Tracking Imaging

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Background:

Acute myocardial ischemia causes myocardial necrosis with subsequent endogenous inflammation, leading to myocardial damage, ventricular dilation, and dysfunction. Colchicine is an inexpensive, orally administered and potent anti-inflammatory medication, so our study aimed to investigate the effect of colchicine on inflammatory markers including NLR and cardiac function in STEMI non-diabetic patients.

Methods:

Our study was conducted in Cardiology department, Aswan University hospital from December 2020 to December 2021 and included 40 non-diabetic patients presented with STEMI and underwent primary PCI then patients were randomized into two groups, group A included 20 patients that received colchicine 0.5mg once daily plus anti-ischemic treatment after reperfusion and group B included 20 patients that received anti-ischemic treatment only. All patients underwent laboratory investigations such as NLR, CRP and cardiac evaluation by echocardiography at baseline and at follow up after one month.

Results:

There was no statistically significant difference between the studied groups as regard NLR at baseline (P value >0.05) and after 1 month (P value >0.05) and There was no statistically significant difference between the studied groups as regard follow-up LVEF (p value 0.5), LVEDD (p value 0.63), LVESD (p value 0.29) and GLS (p value 0.91).

Conclusion:

Addition of colchicine to standard anti ischemic medication post STEMI did not led to significant effect on inflammatory marker include NLR,CRP and cardiac function in non-diabetic patients.

Keywords

STEMI, NLR, Colchicine.