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A Study on Killip's Class at Presentation Influencing the Success of Thrombolysis by Streptokinase in ACS - Stemi Patients in CMCH

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Abstract: *Coronary heart disease is a major health problem in the world. Thrombolysis by fibrinolytic agents is still the treatment for acute myocardial infarction in India. Several factors influence the success of re perfusion in a case of ST elevation myocardial infarction. Among these Killip class has great influence on thrombolysis outcome. So, in the this study, the influence of Killip class on the success of thrombolysis by Inj.Streptokinase in ST elevation myocardial infarction. Patients have been studied and correlated with the data obtained from subjects from similar studies.*

Key words: *Coronary heart disease, Killip class.*

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I. Introduction

In1967 Killip proposed a prognostic classification scheme based on whether the patient has rales on auscultation, in patients presenting with STEMI . The classification remains useful even today as seen from many MI trials. The classification is as follows :

Class I : "no rales" or a third heart sound.

Class II :rales present but only to a "mild to moderate degree" (<50 percent of lung fields) and may or may not have an S_3

Class III :rales in > 50% of each lung field and with"pulmonary edema."

Class IV :"cardiogenic shock"

It has been found that Killip's class greatly influences the thrombolysis outcome .

II. Aim Of The Study

1. To study Killip class influencing the success rate of Thrombolysis with Inj.Stertokinase in Acute coronary syndrome – STEMI patients.
2. Comparing our study done in Chengalpet medical college with similar studies conducted before in famous institutions.

III. Methods And Materials

A trial was conducted in 102 patients in our hospital those are thrombolysed and presented with KC I and KC II . The success and failure rate of thrombolysis among these patients were analysed and studied.

Materials : Electro cardiogram , Auscultation findings

A study "Original research Factors influencing the outcome of thrombolysis in acute myocardial infarction " was done by Dr.GirishRonad et al at , Department of General Medicine, ESIC Medical College, Gulbarga from October 2011 to October 2013. A total of 100 patients were included in the study . The major finding of this study is that the time window period, location of infarct and haemodynamic (Killips) class significantly affected the outcome of thrombolysis. For Killip classification, the p value was found to be < 0.05 (statistical significance) , with success rate highest for those who presented in KC I and failure rate highest for those who presented in KC IV .

In our study, of the 102 patients thrombolysed , 79 patients presented in KC I and 23 in KC II . The success and failure rate of thrombolysis in those who presented with KC I were found to be 70.9% and 29.1%

respectively and the success and failure rate of thrombolysis in those who presented with KC II were found to be 60.9% and 39.1% respectively . No patients presented in KCIII and KC IV presentations. On statistical analysis, there was no significant relationship between Killip classification at the time of presentation and result of thrombolysis using Inj.Streptokinase (p = 0.362) .

Table I: Influence Of Killip Classification On Success Of Thrombolysis In Our Study :

	Success			Failure		
	Number	Percentage within KC	Percentage within result	Number	Percentage within KC	Percentage within result
KC I	56	70.9%	80%	23	29.1%	71.9%
KC II	14	60.9%	20%	09	39.1%	28.1%

Pearson Chi – Square –

Value – 0.830

Df – 1

P = 0.362

Fisher's exact test = 0.253

Killipclassification has no significant relation with the success of thrombolysis .

CHART I: Thrombolysis Failure – Killip Classification Wise

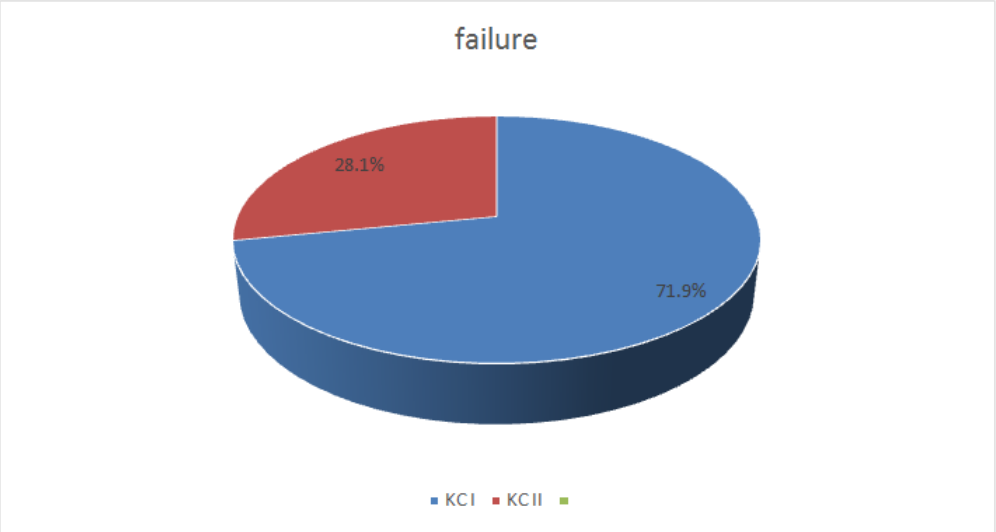
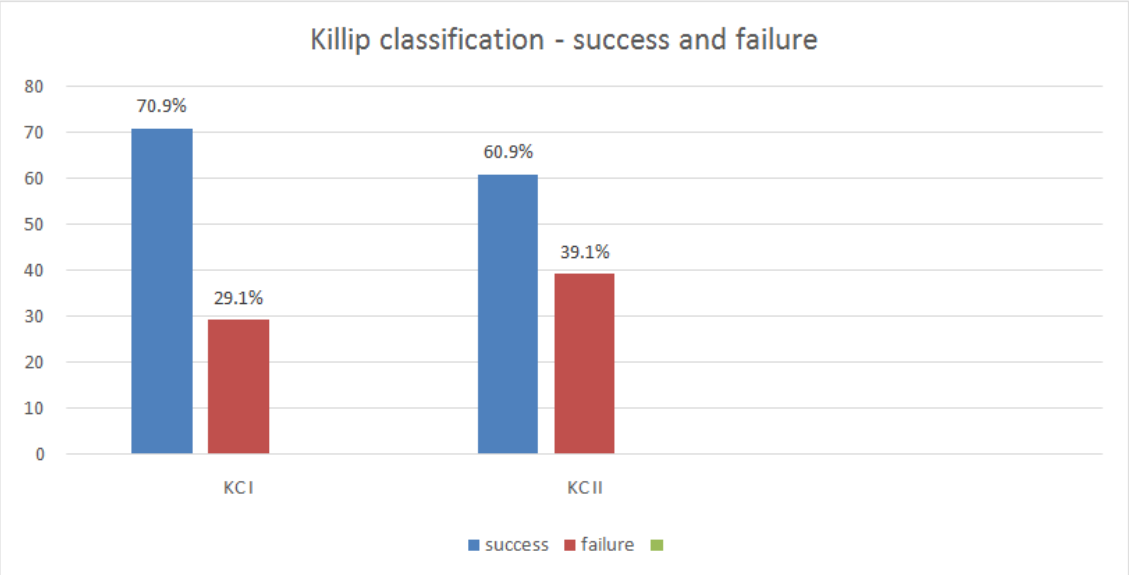


CHART II : Killip Classification Wise Distribution Of Successful And Unsuccessful Thrombolysis



IV. Conclusion

1. Killip classification at the time of presentation was not found to influence the success rate of thrombolysis.
2. This study has certain limits includes Smaller sample size ,Cross sectional study design ,Chances of confounding bias are more , cardiac enzymes and coronary angiogram are not done and this study is based on ECG features alone .

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