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Uric Acid as a Prognostic factor in Assessment of Patients of Unstable Angina

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Aim/Objective: *-*
To know the specificity of use of the Uric Acid as a prognostic factor in the assessment of patients of unstable angina.
Methods: *- Hundred patients diagnosed with unstable angina(cases) were taken from the EMR of Anil Neerukonda Hospital (ANH)and estimated for Uric Acid. Hundred age and sex matched healthy individuals were also compared, along with ECG and Biochemical tests at the time of admission. Uric Acid is estimated in study and control groups. Uric Acid 9.16mg/dl is an independent predictor of adverse cardiac outcome in severe unstable angina in the short term fallow up and hence it is useful for risk stratification of these patients. There was a statistical significance difference in the mean level of uric acid between study group 9.16 ±.788 and control group 4.42+/-0.806.*
Conclusion: *Uric Acid is an important predictor of prognosis in patients of Unstable Angina and can be used to know any adverse out come in patients with Unstable Angina.*

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I. Introduction: -

Unstable Angina[1] also called Crecsendo Angina is a type of Angina Pectoris. Unstable Angina is considered to be present in patients with Ischemic Symptoms suggestive of an acute coronary syndrome[2] and no elevation of troponin[3] with or without ECG changes indicative of Ischemia[4]. Unstable Angina and NSTEMI[5] are frequently coexisisting unstable at initial evaluation. Uric Acid[6] is the end product of purine metabolism Purines are adenine and guanine. It is calalysed by the enzyme xanthine oxidase. It is slightly higher in males when compared to females. Normal level (Males – 5.7mg/dl, Females – 5.6mg/dl)[7] .

II. Method of Estimation:-

It is identified by phosphotungstic Acid Method and estimated by uricase method.Materials and Method:- Hundred patients diagnosed with unstable Angina(cases) and presenting to the EMR of NRIIMS were taken. Both male and female patients were considered. Patients were diagnosed clinically and by taking ECG. Hundred age and sex matched healthy individuals were also taken. All necessary formalities and permission from Ethics Committies of NRIIMS were taken. The patients were considered during the period from Jan-2019 to Feb-2020.

Inclusion Criteria:-

1. Age>40 Years.
2. Both Male and Female were considered.
3. All Patients with unstable Angina[8]

Exclusion Criteria:-

All Patients with h/o M I in preceding 1 month were excluded.

1. Patients with existence of any inflection were excluded.
2. Patients with h/o of Neoplasm were excluded.

Statistics[9]: -

Result were analysed by using student't 'test [10]method and by making use of SPSS version 2.0 software.

Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
Uric acid	Group1	100	9.16	.788	.079
	Group2	100	4.42	.806	.081

Independent Samples Test

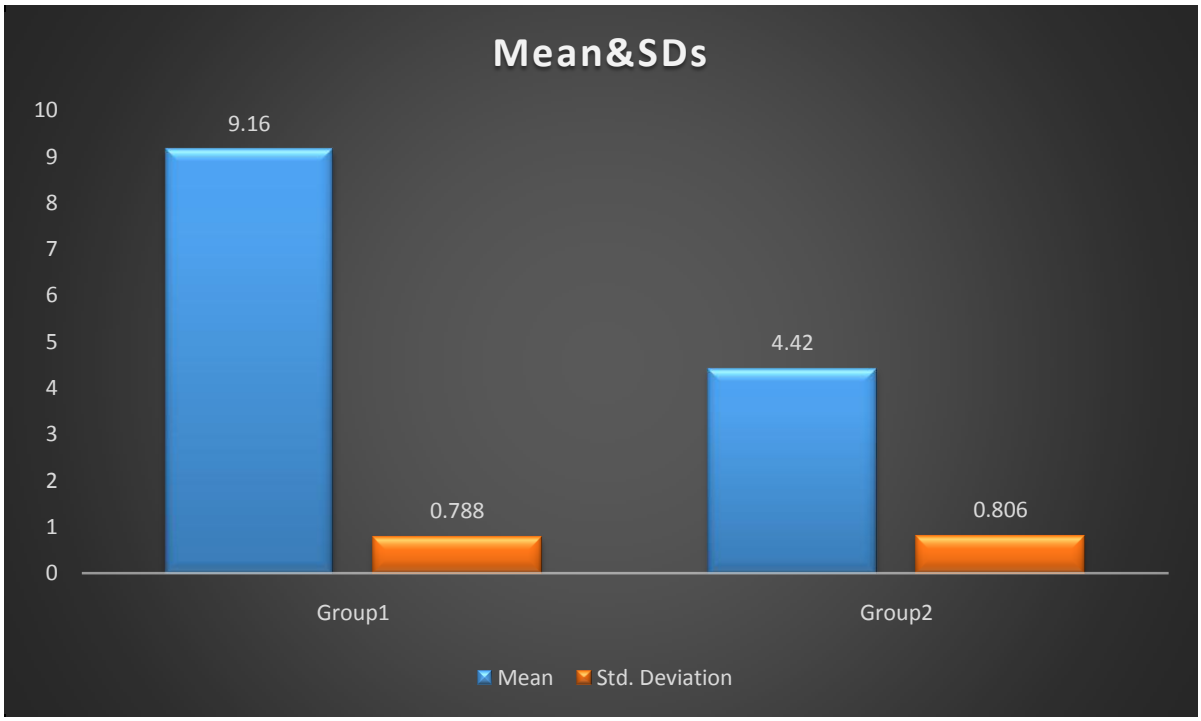
		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
Uric acid	Equal variances assumed	.142	.707	42.049	198
	Equal variances not assumed			42.049	197.893

Independent Samples Test

		t-test for Equality of Means			
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference
					Lower
Uric acid	Equal variances assumed	.000	4.740	.113	4.518
	Equal variances not assumed	.000	4.740	.113	4.518

Independent Samples Test

		t-test for Equality of Means
		95% Confidence Interval of the Difference
		Upper
Uric acid	Equal variances assumed	4.962
	Equal variances not assumed	4.962



III. Results:-

There was statistical significant difference in the mean level of Uric Acid between study of group 9.16 ± 0.788 and controls 4.42 ± 0.806. Out of hundred study group 65 (65%) were males and 35 (35%) were females. Male patients showed greater increase in Uric Acid when compared to females. The 'P 'Value was is < 0.05 which is significant. Thirty patients (35%) showed increase in uric acid. Out of thirty patients, 15 patients (50%) developed congestive cardiac failure. 10 patients with increase uric acid developed arrhythmias.

Discussion: Out of hundred study group 65 (65%) were males and 35 (35%) were females.

There was statistical significant difference in the mean level of Uric Acid between study of group 9.16 ± 0.788 and controls 4.42 ± 0.806. The 'P 'Value was is < 0.05 which is significant. Thirty patients (35%) showed increase in uric acid.The present study is consistent with the findings of S.Hasik ,D.Kadic etal[11].Also Doghui Zangh etal[12] also showed similar results.

IV. Conclusion: -

Uric Acid is an important predictor of prognosis in patients of Unstable Angina and can be used to know any adverse out come in patients with Unstable Angina.

Bibliography:-

[1]. European Heart Journal. 37 (3): 267–315.
[2]. Journal of the American College of Cardiology. 60 (7): 645–81
[3]. Braunwald, E. (1998). "Unstable Angina: An Etiologic Approach to Management". Circulation. **98** (21): 2219–2222.
[4]. European Heart Journal. 30 (2): 162–169.
[5]. Journal of Internal Medicine. 231 (4): 433–6.
[6]. Oxford Hand Book Of Clinical And Laboratory Investigation: oxford.
[7]. University Press: Haematology; 2010; Chapter12; pg689
[8]. Oxford Hand Book Of Clinical And Laboratory Investigation; Drew Provan;oxford University Press;2010; :Hematology ;Chapter12;pg690
[9]. Harrison's Principles Of Internal MedicineJameson,Fauci,Kasper;Mc Graw Hill Publication;Gout;Volume1;Chapter21;pg1124-25
[10]. Szabó, István (2003), Springer Berlin Heidelberg, pp. 196–199.
[11]. Med Arch 2017 Apr;71(2):115-118.
[12]. J Thorac Dis. 2016 Nov; 8(11): E1462–E1466.

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