[PP-1]
The Association Between Plasma Osmolality and Fibrinolysis Outcome in Patients with ST-Elevation Myocardial Infarction

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ABSTRACT

Background: Although percutaneous coronary intervention (PCI) is the treatment of choice for ST elevation myocardial infarction (STEMI), it is often not possible to implement due to time and economic limitations. In this case, fibrinolysis remain the only choice. When fibrinolysis fail, rescue PCI is needed. However, rescue PCI has higher risk of complications such as hemorrhagic stroke and bleeding complications compared to primary PCI, so it is important to find the feasible factors that may predict fibrinolysis outcome. Hypernatremia can increase thrombosis, also hyperglycemia and uremia alter fibrinolysis activity. As plasma sodium, glucose and blood urea nitrogen are the main component of osmolality, it is recommended to investigate the association between plasma osmolality and fibrinolysis outcome in patients with STEMI.
Methods: Cross sectional study of 103 consecutive STEMI patients who underwent fibrinolysis was conducted. Plasma osmolality was calculated using concentration of plasma sodium, glucose, and blood urea nitrogen on admission. Successful fibrinolysis was evaluated by patient's symptom (reduce or absent of chest pain), ECG (resolution of ST segment) and laboratory tests (troponin I level has reached its peak). Statistical analysis was done using chi-square.
Results: Of 103 patients, 67 patients were classified as having normo-osmole plasma and 36 patients were classified as having hyper-osmole plasma. The proportion of successful fibrinolysis is 66% (53 patients) from normo-osmole group, and 34% (27 patients) from hyper-osmole group. The proportion of failed fibrinolysis is 61% (14 patients) from normo-osmole group and 39% (9 patients) from hyper-osmole group, with no significant difference (p= 0.633).
Conclusions: There is no association between plasma osmolality and fibrinolysis outcome in patients with ST- elevation myocardial infarction.

Keywords: plasma osmolality; fibrinolysis; STEMI

[PP-2]
The Correlation Between the Uses of Heparin with Mortarity Rate of ACS Patients in RSUD Ajibarang

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ABSTRACT

Background: Acute coronary syndrome (ACS) is a global disease issue. AHA/ESC recommends in the management of patients with STEMI in addition to reperfusion therapy, as well as other therapies such as anti-coagulant. The study of heparinization therapy in patients with acute myocardial infarction with ST elevation, with results there are dead, reinfarction, stroke. Based on the description, the researcher intend to find out more whether the use of effective heparin therapy to reduce mortality in ACS patients in Ajibarang Hospital in the period of 1st January, 2015 - 31st December, 2017
Method: Descriptive study with retrospective cross sectional design was used in this research. The data collection was conducted with secondary data with looking at patients medical records. The data of univariate and bivariate were processed with SPSS 17.
Result: The results of this research were obtained 100 ACS cases, 76(76%) STEMI, 16(16%) NSTEMI, 8(8%) UAP. The patients of males were 55(55%) and the females were 44(45%). Patients' heparin group was 83(83%) and non-heparin was 17(17%). From the bivariate analysis, the use of heparin were 38(45.8%) females cases while 45(54.2%) males cases P=0.728. The use of heparin with DM history was 19(22.9%) cases P=0.634. The use of heparin with hypertension history was 40(48.2%) cases P=0.721. The use of heparin with diagnosis were 64(77,1%) STEMI cases, 11(13,3%) NSTEMI cases, and 8(9,6%) UAP cases P=0.134. Whereas the correlation between the use of heparin and the death rate, it was obtained 69(83,1%) survivors cases and 14(16,9%) death cases P=0.025.
Conclusion: From the data, it was obtained that the use of heparin to ACS patients were useful with 69 survivor cases.

Keywords: Acute coronary syndrome (ACS); heparin; mortality rate.

[PP-3]
Study on Hospitalized Acute Heart Failure Patients in South Pesisir Regency: An Insight From The Second Largest Area in West Sumatera

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ABSTRACT

Background: This study was designed to assess characteristics and etiology of patients hospitalized with acute heart failure (AHF) in South Pesisir Regency, the largest contributor of cardiac disease in West Sumatera. Most available data on these patients are limited, especially in Sumatera.
Methods: During 2017 to mid 2018, 141 patients data collected in Muhammad Zein Hospital Painan, as referred hospital in the Regency of South Pesisir, West Sumatera. Participating hospital identified patients with a primary discharge diagnosis of acute heart failure. Clinical characteristics, medical history, etiology, and management were collected through review of medical records.
Results: 141 patients were enrolled into the database by the end of July 2018, which cover data from January 2017 – June 2018. Most patient were male (52.1%), with mean age 62.1 years old. Among patient primarily diagnosed as acute heart failure, new onset AHF (de novo AHF) contributed to 27.9% data, of which 82% due to acute coronary syndrome, while only a few patients presented with reversible myocardial dysfunction such as tachycardia-induced arrhythmogenic cardiomyopathy (12.8%) and hypermetabolic state like thyroid storm (5.1%). There is no extra cardiac pathologies observed in the data that precipitate AHF like pulmonary embolism or pericardial effusion. Most patients with worsening of their pre-existing cardiomyopathy, known as acute decompensated heart failure (ADHF), featured 72.1% of the cases. This demographic study shows that there is a high-prevalence of comorbidities including dilated cardiomyopathy (57.4%), worsening ischemia (30.7%), atrial fibrillation (14.8%), and valvular heart disease (2.1%). The other medical comorbidities that contribute to the onset and severity of hospital admission are pneumonia or respiratory process (35%), renal dysfunction (20.7%), and diabetes mellitus (18.6%), as three largest contributor of non-cardiac co-morbidities that are highly prevalent in this study.
Conclusion: Acute decompensated heart failure is the most common clinical diagnosis of acute heart failure in West Sumatera, especially The South Pesisir Regency. Only less than one-third of AHF patients presented with de novo cases, with ACS as the main cause. This initial data provided important insight of management and pattern of care for hospitalized patient. Increased quality of care also need to be increased with these patient due to other medical comorbidities, cardiac and non-cardiac events.

Keywords: Acute heart failure; decompensated heart failure; South Pesisir Regency; West Sumatera

[PP-4]

Multiple Risk Factors of Atrial Fibrillation in Men and Women Based on CHA2DS2-VASc Score in Hasna Medika Heart Hospital Cirebon

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ABSTRACT

Stroke risk stratification is recommended in patients with Atrial Fibrillation to assess stroke risk and inform decisions on oral anticoagulant treatment. Higher stroke risk in women with AF has been evident. Using Hasna Medika registries, we identified patients with incident non valvular AF from june 1, 2016, through June 30, 2017. Patients receiving OAC at baseline were excluded. CHA2DS2-VASc score were calculated for men and women than followed up one year for stroke incidents and number of death. A total of 247 patients with non valvular (57,5% women) contributed to the study. The mean ages for women and men were 54,8 years and 57,8 years, respectively. The mean CHA2DS2-VASc score were 2,3 for women and 1,5 for men. After one year followed up there are 17 stroke event (13 women) out of 247 patients and 6 death (5 women).

Keywords : Atrial Fibrillation; CHA2DS2-VASc score; Stroke

Image:

KNOW YOUR STROKE RISK

CHA2DS2-VASc Risk	Score	CHA2DS2-VASc Score	Adjusted stroke rate (% / year)
		0	0
CHF or LVEF <40%	1	1	1.3
Hypertension	1	2	2.2
Age > 75	2	3	3.2
Diabetes	1	4	4
Stroke / TIA / Thromboembolism	2	5	6.7
Vascular Disease	1	6	9.8
Age 65-74	1	7	9.6
Female	1	8	6.7
		9	15.2

CHF = congestive heart failure; TIA - transient ischemic attack; LVEF = left ventricular ejection fraction.

Table:

VARIABEL	MEN	WOMEN	ALL
PERCENT (n)	42,5% (105)	57,5% (142)	100% (247)
AGE, MEAN (SD)	57,8 (13,10)	54,8 (12,71)	56,1(12,94)
< 65 years	64.8%	78.2%	72.5%
65 – 74 years	31.4%	16.2%	22.7%
≥ 75 years	3.8%	5.6%	4.9%
CH2DS2-VASc, MEAN (SD)	1,5 (0,99)	2,3 (1,09)	1,9 (1,12)
SCORE 0	20.0%	0.0%	8.5%
SCORE 1	29.5%	30.3%	30.0%
SCORE 2	34.3%	28.2%	30,8%
SCORE 3	16.2%	26.8%	22.3%
SCORE 4	0.0%	12.7%	7,3%
SCORE 5	0.0%	2.1%	1.2%
CHF (n)	55.2% (58)	51.4% (73)	53.0%
HT (n)	47.6% (50)	42.2% (60)	44.5%
STROKE (n)	0.0%	0.0%	0.0%
VASCULAR DISEASE (n)	0.0%	0.0%	0.0%
DM (n)	4.76% (5)	7.04% (10)	6.1% (15)
COPD (n)	13.3% (14)	0.7% (1)	6.1% (15)
AFTER 1 YEAR FOLLOWED UP			
STROKE (n)	3.8% (4)	9.1% (13)	6.9% (17)
SCORE 0	0% (0)	0% (0)	0% (0)
SCORE 1	0.0%	1.4% (2)	0.8% (2)
SOCRE 2	2.9% (3)	2.8% (4)	2.8% (7)
SCORE 3	0.9% (1)	2.1% (3)	1.6% (4)
SCORE 4	0% (0)	2.1% (3)	1.2% (3)
SCORE 5	0% (0)	0.7% (1)	0,4% (1)
DEATH (n)	0.9% (1)	3.52% (5)	2.43% (6)

[PP-5]
Predictors of Recovery in Peripartum Cardiomiopathy at Hasna Medika Heart Hospital Cirebon

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ABSTRACT

Peripartum Cardiomyopathy (PPCM) is rare but potentially life threatening. PPCM affecting women in late pregnancy or early puerperium. Diagnosis is made based on the finding of Left Ventricular Systolic Dysfunction after excluding other causes of HF. Left Ventricular Systolic Dysfunction recovery is critical for prognosis. Using Hasna Medika registries, a retrospective study was conducted from May 1, 2017 through May 1, 2018. Ejection Fraction, Obstetric History, Age, and Risk Factor of patients with a diagnosis of PPCM were reviewed. Improvement in LV systolic function was noted from Echocardiography reports. A total of 24 patients contributed. Accordance with the data that we collect, we conclude that almost patients with low EF (< 30%) at admission, unipara in their obstetric history, > 35 at age in pregnancy, and with Hypertension have a partial improvement (EF 30%-50%) in one year follow up.

Key Words : Peripartum Cardiomyopathy; Left Ventricular Systolic Dysfunction; Ejection Fraction

Image:

Variable	Complete Improvement (EF >50%)	Partial Improvement (EF 30%-50%)	No Improvement (EF<30%)
Ejection Fraction			
< 30 %	4 (26.6%)	10 (66.6%)	1 (6.6%)
> 30 %	6 (66.6%)	3 (33.3%)	0
Obstetric History			
Multipara	12 (80%)	3 (20%)	0
Unipara	3 (33.3%)	5 (55.5%)	1 (11.1%)
Age			
<25	5 (55.5%)	3 (33.3%)	1 (11.1%)
25-35	4 (40%)	6 (60%)	0
>35	1 (20%)	4 (80%)	0
Risk Factor			
Hypertension	2 (40%)	3 (60%)	0
Gestational hypertension	0	2 (100%)	0
Preeclampsia	0	1 (50%)	1 (50%)
No risk	9 (60%)	6 (40%)	0

[PP-6]
Correlation Between Undiagnosed Depression, Anxiety Disorder, and Hypertension in Cililin Primary Health Center: An Analytical Study

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ABSTRACT

Background: Depression, anxiety disorder, and hypertension have been hypothesized and studied for their association. Psychosocial stressor, depression, and anxiety disorder could raise autonomic arousal via the hypothalamic-pituitary axis which increase catecholamine. This phenomenon could increase the risk of hypertension.[1] if this condition left untreated, it could make the hypertension harder to control.
Objective: To find the correlation between depression, anxiety disorder, and hypertension.
Method: Data was taken from patients in PROLANIS activity at Cililin Primary Health Center from November 2017 – January 2018. Patient's blood pressure was measured by standard sphygmomanometer following AHA recommendation. Zung Self-Rating Depression Scale and Zung Self-Rating Anxiety Scale were used to diagnose and determine the severity of depression and anxiety disorder. Association between depression, anxiety, and hypertension were determined using the spearman correlation test.
Result: Seventy-five patient were found in this study, which 39 (52%) of them were female. Adult patient was higher (n=47) than elderly. The average age of those patients were 58 $\pm$ 9.338 years old. Data showed that 50 patients (66.7%) already had hypertension more than 5 years. Data also showed that 28 patients (37.3%) had poor control of their hypertension. Mild Depression was found in 36 patients (48%) in this study, while moderate depression was found in 16 patients (21.3%). 1 patient (1.3%) has been found with severe depression. Mild to moderate anxiety disorder was found in 49 patients (65.3%), while severe anxiety disorder was found in 6 patients (8%). There was a moderate positive correlation between depression score (r_s = .326, p = 0.004) and anxiety score (r_s = .338, p = .003) with hypertension.
Conclusion: Moderate positive association between depression, anxiety, and hypertension have been found in this study. However, many other factors can contribute to hypertension or affective disorder. Screening for depression and anxiety disorder in hypertension patients is recommended to improve the outcome of the treatment.

Keywords: Depression; Anxiety Disorder; Long-standing Hypertension

[PP-7]
Association Between Elevated Blood Glucose and Outcome in Acute Heart Failure: Study From Largest Contributor of Cardiac Disease in West Sumatera

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ABSTRACT

Background: High blood glucose had meaningful impact on short-term outcome among patients with acute heart failure. This study conducted to report association between elevated blood glucose with length of stay and mortality, especially in special Minang ethnic in rural South Pesisir Regency, West Sumatera.
Methods: We assessed blood glucose concentration to predict all-cause mortality by 30 days in patients primarily hospitalized with acute heart failure through retrospective cohort methodology.
Results: A total 141 subjects were enrolled with AHF (mean age 62.1 years; 52.1% male). Mean blood glucose concentration during ER admission was 162.95 mg/dl (minimum value 29 mg/dl and maximum 573 mg/dl), with 18.6% patients known had previous history of diabetes mellitus. After 30 days, we compared median blood glucose between survivors and decedents. The data showed that survivors had lower median blood glucose concentration (157.79 mg/dl) while the others had median blood glucose 288.25 mg/dl. Data distribution was normal based on Kolmogorov-Smirnov normality test. After adjustment for relevant confounders, elevated blood glucose concentration assessed as non-independent factor for higher mortality rate, but has higher OR (3.9). The risk level also showed consistent across all subgroup of patients, including different precipitating factors like pneumonia or respiratory process (OR 1.8), poor renal function (OR 2.1), and coronary artery disease (OR 1.5).
Conclusions: Higher blood glucose concentration is a powerful prognostic factor in patients with acute heart failure. Intensive care for these patient should had been include this parameter since blood glucose is modifiable factor, so it may represent valid target for therapeutic intervention.

Keywords: Elevated Blood Glucose; Outcome; Acute Heart Failure; West Sumatera

[PP-8]
Different Clinical Outcomes Based On Precipitating Factors in Patient With Acute Heart Failure: A Report From Rural Area in West Sumatera, Indonesia

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ABSTRACT

Background: Few studies have explored the relationship between contributing factors to acute heart failure hospitalization and clinical outcomes. This study was aimed to describe acute heart failure clinical outcomes with different precipitating factors, within origin Minang ethnic in rural area of West Sumatera.
Methods: During 2017 to mid 2018, 141 patients were collected by reviewing medical record. We assessed ischemia, arrhytmia, nonadherence to medication, pneumonia or respiratory process, uncontrolled hypertension, poor renal function, and diabetes mellitus as identifiable factors contributed to admission. These factors analysed to know clinical outcome, including length of stay and in-hospital mortality.
Results: 52.1% of patients were male, with 62.1 years mean patient age. Many patients had not just one precipitating factors, with ishcemia (40.7%), pneumonia or respiratory process (35%), and uncontrolled hypertension (30.7%) as the most significant factors. 20,7% patients hospitalized in short length of stay (1-3 days), 47.9% in medium length of stay (4-5 days), and 31.4% in long hospitalization. Poor renal function (OR 5.3), pneumonia or respiratory process (OR 3.7), and diabetes mellitus (OR 1.3) were independently associated with longer hospital length of stay through bivariat analytic. Furthermore, we performed multivariat analytic on these significant factors through logistic regression in which showed 80,1% probability of longer hopitalization. While longer hospitalization, CAD, and arrhytmia were also associated with higher mortality rate in patient primarily admitted with acute heart failure.
Conclussion: There is a great improvement in care quality during acute heart failure patients hospitalization. It showed decline mortality and hospital LOS after standardized guideline published and invariably reached rural area in Indonesia. Unfortunately, patients admitted with acute heart failure with multiple precipitating factors still need intensive care during long hospitalization periode and higher mortality rate. Further patterns of care and studies are still needed to be conducted for the better future of these patients.

Keywords: Clinical outcome; factor; acute heart failure; west sumatera

[PP-9]
Alteplase and Streptokinase: Which is Better for Catheter Direct Thrombolysis in Acute Limb Ischaemia

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ABSTRACT

Background: Acute limb ischemia (ALI) is a vascular emergency. Intra-arterial catheter-directed thrombolysis (CDT) is one of the most widely available and effective treatments for patients with ALI. Alteplase and streptokinase are the most common agent used for CDT.
Aim: The aim of this study is to assess the efficacy and outcomes of alteplase Vs streptokinase for CDT in ALI at dr.Sardjito General Hospital
Methods: Data were collected from vascular patients registry at Dr. Sardjito Hospital which begin from January 2015 until December 2017. There were 25 patients with complete data enrolled in this registry. We compared alteplase and streptokinase as an agent for CDT. The outcomes was death, success, bleeding complication, need to perform embolectomy and amputation.
Results: Six (54.5%) patients was death in streptokinase group compared with 3 (21.4%) patients in alteplase groups (p=0.98). Four (36.4%) patients in streptokinase group was successful compared with 5 (35.7%) in alteplase group (p=0.997). Only 1 (7.1%) patients had a major bleeding complication in alteplase group and threre was no complication of major bleeding in streptokinase group (p=0.56). Five (45.5%) patients in streptokinase group underwent embolectomy compared with 3 (7.1%) patients in alteplase group (p=0.19). Five (45.5%) patients in streptokinase group underwent amputation compared with 5 (35.7%) in alteplase group (p=0.47).
Conclusion: Streptokinase is not inferior compared with alteplase as an thrombolytic agent for CDT.

Keywords: ALI; CDT; alteplase; streptokinase

[PP-10]
Pregnancy with Heart Disease: Contra Indication, Hope or Challenge?

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ABSTRACT

Heart disease in pregnant women can cause serious complications. Heart disease is one cause of non-obstetric maternal mortality. Pregnant women with heart disease are at risk of adverse maternal and fetal outcomes**.** Research needs to be done to determine the incidence, characteristics, maternal and perinatal outcomes in women with heart disease. The results are to be used for the evaluation of obstetric care in women with heart disease. During January – July 2018, 23 pregnancies of patients with heart disease admitted to dr. Sardjito Hospital were studied retrospectively from medical record to investigate the maternal and perinatal outcomes. Maternal outcome were cardiovascular maternal complications developed in 26% of all women, mother needs intensive care was 30,4%, and maternal mortality was 17,3%. Perinatal outcome was 91,3% live birth, perinatal complications were prematurity 39,1%, low birth weight 43,4%, IUGR 26%, IUFD 13,04% and neonatal death 4,3%. Conclusion: Woman with heart disease who wish to conceive should get special pre conception counseling, ante natal care, intrapartum care, and post partum care. Joint efforts of obstetricians and cardiologist is definitely required. Pregnancy with low risk heart disease describes good maternal and perinatal outcomes.

Keywords : pregnancy; heart disease; maternal oucome; perinatal outcome

[PP-11]
Determinants of Various Aspects Affecting Length of Stay in Acute Coronary Syndrome Patients at Tidar General Hospital

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ABSTRACT

Background: Acute coronary syndrome (ACS) is one of the leading cause for hospitalization due to cardiac disease. One of many quality of care indicators can be represented by hospital length of stay (LOS). Studies of LOS in ACS patients *showed* to have conflicting results. We aim to determine factors that may influence the ACS hospitalization length in Tidar General Hospital.
Methods: Medical records of 266 ACS patients in Tidar General Hospital were analyzed from January to December 2017. Demographic data, clinical profiles, laboratory parameters and LOS were evaluated. Clinical profiles were assessed at the time of hospital admission while laboratory parameters were taken within 24 hours of hospital admission. One Way ANOVA, Mann Whitney U test and Spearman's correlation were applied to establish statistical result.
Results: The mean age of this study was 58.6 ± 10.9, of those 195 were men (73.3%). ST elevation myocardial infarction was found in 114 patients (42.9%), non ST elevation myocardial infarction in 63 patients (23.7%), and unstable angina pectoris in 89 patients (33.5%). There was a statistically significant difference (p< 0.000) between LOS in three groups of ACS. LOS was found to be longer and statistically significant (p<0.000) in positive troponin patients. Global registry of acute coronary events (GRACE) score had statistical significant and positive correlation (r = 0.416) to LOS. Both systolic (r = -0.136) and diastolic blood pressure (r = -0.159) had statistical significant and negative correlation to LOS, while heart rate did not. Age (r = 0.218) and various laboratory parameters such as creatinine kinase MB, creatinine and urea had statistically significant and positive correlation to LOS, being r = 0.355, r = 0.148 and r = 0.257 respectively.
Conclusion: Longer LOS may be predicted by various aspects at admission, particularly GRACE score.

Keywords: Acute Coronary Syndrome; hospital length of stay; GRACE score

[PP-12]
Association Between Renal Function and Electrolyte Abnormalities Among Patients With Acute Heart Failure: Insight From Rural Area in West Sumatera

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ABSTRACT

Background: Electrolyte abnormalities are potential dangerous complication in patients, especially with heart failure. Furthermore, poor renal function also contributed in this abnormality state. In some rural area, routine electrolyte assessment was rarely examined. This study is conducted to specifically assess condition of electrolyte abnormality in poor renal function among patients with primarily admitted because of acute heart failure.
Methods: 141 patients data were collected from January 2017 until June 2018. Data was collected in Muhammad Zein Hospital as main referred hospital in South Pesisir Regency, West Sumatera. Patients' information was reviewed through medical record then analyzed to compare status of electrolyte in different renal function among patient with acute heart failure.
Result: Total of 141 patients were analyzed, of those 52.1% was male with mean age 62.1 years. Another significant patients' characteristics are 62.1% cases categorized as Acute Decompensated Heart Failure with previous history of heart failure and the others were de novo HF cases. With hypertension observed in 62.1% of patients and poor renal function in 20.7% of patients. With limited resources in laboratory study, only three components of electrolyte that routinely examined which is natrium, kalium, and chloride. 38.6% of cases categorized as normal natrium concentration, while 37.1% was hyponatremia and 24.3% was hypernatremia. Meanwhile, hypokalemia featured in most cases (66.4%), with 30.7% of patients had normal kalium and only 2.9% had high kalium concentration. The largest data showed low chloride concentration (93.6%) with only 6.4% of patients had normal level. Analysis using Pearson Chi-square test to find association between renal function and electrolyte level showed there are association among patients with acute heart failure between renal function and electrolyte abnormality, including natrium concentration ($p = 0.021$) and kalium concentration ($p = 0.002$). Meanwhile we found no correlation between renal function with chloride level in patients with acute heart failure.
Conclussion: This study showed association between kalium concentration and natrium concentration and poor renal function among patient with acute heart failure. We suggest this routine electrolyte assessment is also become physician's attention also in rural area to increase patient management with acute heart failure.

[PP-13]
Association Between Left Ventricular Ejection Fraction With Coronary Angiography Result in Coronary Artery Disease

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ABSTRACT

Introduction : One of the determinant for CAD severity are the size and the location of arterial stenosis. Those two determinants can be seen through coronary angiography examination, which is considered to be the gold standard examination for patients suspected with CAD. This perfusion disturbance will slowly decrease myocardium contractility. Myocardium contractility can be globally assessed by examining left ventricle ejection fraction.
Aim : To determine the association between Left Ventricle Ejection Fraction with Coronary Angiography Result.
Method : This research is an observational research with cross sectional analytic design. Data are obtained from medical records of patients who are diagnosed with CAD and had their LVEF examined by cardiologist in RSUD Abdul Wahab Sjahranie in 2016. The research variables are left ventricle ejection fraction, the location of stenosis, and the number of vessels involved. The hypothesis is tested by Independent T-Test with SPSS 23 for Mac OS.
Results : 59 samples were included in this research. Univariate analysis shows TVD holds the highest number of vessels involved found in patients, with 34 samples. This makes the combination of LAD, LCx, and RCA holds the highest number of stenosis location found in patients with 34 samples. For the location of stenosis, the combination of LAD, LCx (p=0,039) and RCA, LCx (p=o,028) both show association to LVEF.
Conclusions : There is no significant correlation between the number of vessels involved with LVEF, while the combination of stenosis in LAD, LCx or RCA, LCx show significant association.

Keywords : Left Ventricular Ejection Fraction; Coronary Artery Disease; Coronary Arteriography; Coronary Artery Stenosis

[PP-14]
Palliative Care Effectiveness in Improving Quality of Life and Symptoms Burden of Advance Heart Failure Patients: A Systematic Review

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ABSTRACT

Introduction: Prevalence of heart failure worldwide is increasing. Heart failure therapies often fail to prevent worsening and recurrences. As the common cause of high morbidity and mortality, heart failure patients should have equal access to palliative care as other end stage disease. Palliative care is often used in various end stage disease, especially to improve quality of life and decrease mortality rate.
Objective: To assess the effectiveness of palliative care to improve quality of life, burden of symptoms, depression, anxiety and mortality of patients with heart failure.
Method: Major online journal database (Pubmed®) was systematically searched using keyword Heart Failure AND Palliative Care. Only Randomized Controlled Trials (RCT) which met the predefined inclusion criteria were included. We independently searched the articles, extracted data, and assessed the quality of included studies. The JADAD scale criteria is used and we critically appraised quality of the studies.
Results: Eight randomized clinical trials were identified with total sample of 851 heart failure patients. Seven studies showed Jadad score ≥ 3 (high quality) and one study showed Jadad Score ≤ 2 (low quality). There were significantly increased quality of life in 7 studies ($p < 0.05$), reduced symptoms burden, depression and anxiety in 4 studies ($p < 0.05$), and there was no significant impact on mortality in seven studies.
Conclusion: This systematic review reveals that palliative care is effective in improving quality of life of advance heart failure, especially to reduce symptoms burden, depression and anxiety, but has no effect on mortality.

Keywords: Palliative care; heart failure; randomized controlled clinical trial; systematic review

[PP-15]
Left Ventricular Ejection Fraction on Admission did not Affect Mode of Ventilation and In-Hospital Outcomes among Patients with Acute Cardiogenic Pulmonary Edema

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ABSTRACT

Background: Despite aggressive management, patient with acute cardiogenic pulmonary edema (ACPE) still have poor clinical outcomes and high mortality. Previous study reported different long-term outcome among ACPE patients with various left ventricle (LV) systolic function, and those with LV ejection fraction (LVEF) ≥ 50% presented the lowest 1-year mortality rate.
Objectives: This study aimed to determine clinical profile and short-term (in hospital) outcomes among patient with ACPE according to baseline LVEF on admission.
Methods: Electronic medical record data were collected retrospectively from 2014 to 2018, and from 410 patients with ACPE, 196 patients were excluded due to missing data. According to LV ejection fraction on admission, we classified patients as 3 groups; HF with reduced EF (≤40%), HF mid-range EF (41%-49%) and HF preserved EF (≥50%). Baseline patient characteristics were examined, and the outcomes measured were in-hospital mortality and length of stay (LoS).
Results: A total 214 patients were analyzed in the study. ACPE patient are predominantly male (72.9%), mean age 61.72 $\pm$ 0.8 years, predominantly HFrEF (64.9%), and having ischaemic heart disease (78%) as underlying disease. Most of clinical profiles were not significantly different in all groups including gender, age, ureum, sistolic blood pressure, diastolic blood pressure, and blood gas analysis. Patients with HFrEF had higher number of smoker and presented with STEMI more frequent as compared to other groups. Interestingly, we observed significantly higher new onset atrial fibrillation in patient with HFpEF as compared to other groups (37% vs. 9% vs. 17%, $p<0.005$; respectively). Similar proportion of patients in all groups received standard oxygen therapy, non-invasive ventilation/CPAP and invasive mechanical ventilation as mode of ventilation. However, there was no significant difference in all-cause mortality ($p=0.63$) as well as length of stay ($p=0.892$) among all different LVEF groups.
Conclusion: We observed predominantly reduced LVEF on admission among ACPE patient. Despite more frequent atrial fibrillation in group with preserved EF and higher number of STEMI in group with reduced EF, there was no different in length of stay and in-hospital mortality among all groups with different LVEF.