## **CASE REPORT:**

## A MAN, 65 YEARS OLD WITH CONGESTIVE HEART FAILURE

## **NYHA III**





By:

Dr.dr.Indranila KS,SpPK(K)

Clinical Pathology, Medical Faculty, University Of Diponegoro, Semarang.

Presented at: ISHASS 2017



#### CASE REPORTS

## I. PATIENTS IDENTITY AND HISTORY:

Mr. S, 65 years old., come to. Dr. Kariadi hospital semarang, with a complaint of shortness of breath. Shortness of breath since a month before admission. Shortness of breath when the patient was advancing on walking by foot, and decreases when resting.

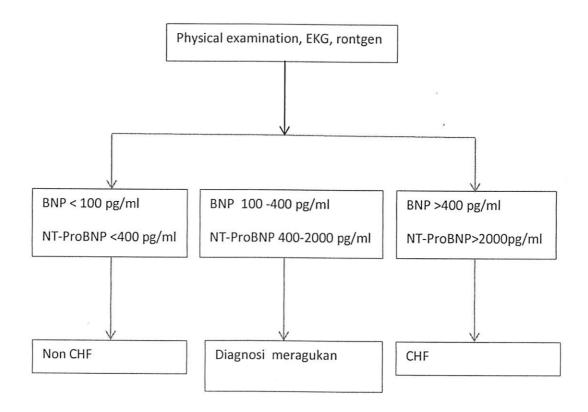
#### II. PHYSICAL EXAMINATION:

Patients often wake up at midnight because of shortness of breath, sleep with two pillows, foot oedem (-); palpitations (+), chest pain (-), fever (-). The JVP R +3 cm; ronkhi (+/+); The liver is palpable 4 cm below the arcus costae.

### III. LABORATORY FINDING SUPPORT:

Hemoglobin 13.8 g / dL; MCH 26.57 pg; MCV77,26 fL; MCHC 34.39 g / dL; platelets 126.000 / mm 3; RDW 16.99%; urea 45 mg /dL; ALP 210 U /L; GGT 259 U /L, Bilirubin Total 3,41 mg /dL, Bilirubin Direk 1, 67 mg /dL. Rontgen examination: Thorax Cardiomegaly And Calcification Arcus Aorta, Edema Pulmonum.

## Algorithma examination, is seen in this figure below:



### IV. TREATMENT HEART FAILURE:

Management of heart failure consists of: diuretics oral or parenteral remains the spearhead of cardiovascular medicine till edema or ascites lost (achieved euvolaemic). Angiotensisn ACE inhibitor or receptor blocker (ARB) small dose can be started after euvolaemic to optimal dose. Beta blockers small doses until the optimal can be started after diuretics and ACE inhibitors are given. Digitalis is given when there is a supra ventricular arrhythmias (atrial fibrillation or other SVT) or three drugs above does not give a satisfactory result. Aldosterone antagonist used to amplify the effect of diuretics or in patients with hypokalemia.

#### V. THEORETICAL / DISCUSSION:

Laboratory tests for heart failure consists of a blood test (Hb, leukocytes, and platelets), serum electrolytes, serum creatinine, glomerular filtration rate, blood glucose, liver function and urinalysis. A blood test marker for heart failure are: B-type natriuretic peptide (BNP) and N-terminal pro-BNP (NT-proBNP) are used for the diagnosis and management of heart failure.

In heart failure NYHA I, where the clinical diagnosis is less clear that the levels of pro-BNP already showed abnormalities real, it advantageous to make early diagnosis Pro BNP will also increase in accordance with the severity of the disorder, so it can be used for stagging and prognosis Additionally Pro BNP also be used to get rid of asphyxiation due to the differential diagnosis of respiratory tract disorders in which the Pro-BNP levels are not increased. Pro synthesis of the prohormone BNP as in myocardial cells mainly left ventricle of the heart with a 108 amino acid chain and secreted into the circulation and split into 1 NT- pro BNP molecule with the amino acids 1-76 sequnce inactive and one pro-BNP molecule with the sequence 77-108 32 active amino acids. -Pro NT BNP has a half life of 1-2 hours while the biologically active BNP has a half-life of 20 minutes. Heart failure is a clinical syndrome that arise as a result of the inability of the heart to pump blood due to functional or structural. Heart failure has a wide spectrum of disorders of mild to severe disturbances. The main manifestations of heart failure are shortness of breath and fatigue limit physical labor and is accompanied fluid resistance that led to the dam of pulmonary and peripheral

edema.

Diagnosis: is made based on history, physical examination, ECG, chest X-ray, ECG and catheterization. Framingham criteria are major criteria: paroxysmal nocturnal dyspnea, distended neck veins, pulmonary crackles, cardiomegaly, acute pulmonary edema, S3 gallop, elevation of the jugular venous pressure, reflux hepatojugular. Minor criteria: extremity edema and nighttime cough. , Dyspnea d'effort, hepatomegaly, pleural effusion, obedience 1/3 normal vital capacity (Tachikardi (> 120x / min). The diagnosis is made with at least one major criterion and 2 minor criteria. The functional classification of heart failure who used the New York Heart Association (NYHA) functional capabilities based on those with heart failure.

| Class | Definition   |
|-------|--|
| I     | Heart defects without physical limitations. Physical activity does not   |
|       | cause fatigue, palpitation, chest tightness or pain                      |
| II    | Heart defects: there are mild physical limitations, disappears at rest.  |
|       | Strenuous physical activity causes fatigue, palpitation, chest tightness |
|       | or pain.   |
| III   | Limitations on during physical activity, disappears at rest. Physical    |
|       | activity was lighter already causing fatigue, shortness of palpitations  |
|       | or chest pain.   |
| IV    | heart abnormalities that cause discomfort in physical activity.          |
|       | Symptoms of heart disease or angina syndrome mungkiun been found         |
|       | in a resting state.  |

Differential diagnosis: The main clinical symptoms of heart failure are shortness of breath. The differential diagnosis of shortness of breath (dyspnea) are: bronchial asthma, pneumonia, bronchitis, congestive heart failure, pulmonary embolism pleural effusion, pneumothorax.

Heart failure in type 2 diabetes: cardiovascular disease is the leading cause of death in diabetes. Patients with type 2 Dm can suffer coronary heart two times larger and causing myocardial infarction, heart failure, shock, and death. Patients with type 2 Dm may also develop cardiomyopathy, heart disease without coronary heart disease with abnormal myocardial relaxation and clinically proven with left ventricular filling pressure is increased.

#### VI. CLINICAL DIAGNOSIS:

#### CHF WITH NYHA III

### VII. THERAPY IN CHRONIC HEART FAILURE:

Management of heart failure comprises: oral and parenteral diuretics remain the spearhead of cardiovascular medicine till edema or ascites lost (achieved euvolaemic). Angiotensisn ACE inhibitor or receptor blocker (ARB) small dose can be started after euvolaemic samapai optimal dose. Beta blockers small doses until the optimal can be started after diuretics and ACE inhibitors are given. Digitalis is given when there is a supra ventricular arrhythmias (atrial fibrillation or other SVT) or three drugs above does not give a satisfactory result. Aldosterone antagonist used to amplify the effect of diuretics or in patients with hypokalemia.

## VIII. CONCLUSION & SUGGESTION:

Conclusion: based on history, physical examination and laboratory results and other investigations, concluded that patients suffering from CHF NYHA III and nephrolithiasis. Suggestion: examination is CKMB, NT Pro BNP to confirm the diagnosis of congestive heart failure and to assess the prognostic of disease. Examination of urine culture to see the complications and progresivity of the disease.



Dear Participant(s),

Thank you for submitting the abstract for the "2nd International Symposium on Human Health and Aging Sciences: The Role of Hormone and Hormonal Disorder Management for Healthy Human Kind in Aging Population" that will be held on 27-29th of January 2017.

We are pleased to inform you that abstract indicated below has been ACCEPTED for presentation at the Symposium.

Abstract ID : 1738

Abstract Title : Case Report: A man, 65 years old with congestive heart failure NYHA III

First Author : Indranila KS

Abstracts which are selected for an oral and poster presentation will be announced on 06th of January 2017.

Should you have any revision for your Abstracts, please resubmit to ishhas@unissula.ac.id no longer than 06th January 2017. Please pay full attention for the abstract instruction to ensure your abstract printing in the conference book.

Valuable papers will be considered for publication in Bangladesh Journal of Medical Science (BJMS). We encourage you to begin writing your full article before attend the meeting.

Please be sure to make registration on-line including the payment to ensure your presentation on the meeting program. For international authors who require visas to enter the Indonesia, you should begin the process upon receipt of this email.

Please mark your calendar and keep the deadline.

Should you have any questions, please feel free to contact our secretariat at ishhas@unissula.ac.id

Sincerely yours,

2<sup>nd</sup> ISHHAS 2017 Scientific Committee







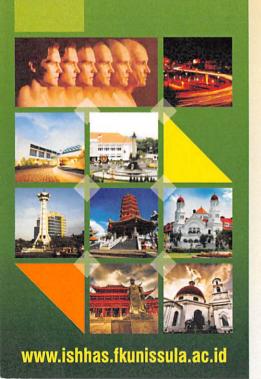












# CERTIFICATE

This is to certify that

# Dr.dr. Indranila Kustarini Samsuria, Sp.PK(K)

As

ORAL / POSTER PRESENTER

On

# 2<sup>nd</sup> INTERNATIONAL SYMPOSIUM ON HUMAN'S HEALTH AND AGING SCIENCES

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