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Management of Deadly Acute Heart Failure in Young Patient

Isman Firdaus

Department of Cardiology and Vascular Medicine, University of Indonesia / National Cardiovascular Center Harapan Kita, Indonesia

Background

Recently, heart failure has become the most prevalence in Indonesia because of some reasons such as most of acute coronary disease without reperfusion, infectious disease, hypertension, fatty food, hypertension, active smoker and less of heart failure information in population. Most of HF patients admitted to the emergency room in very sick condition with severe complication.

Case

Male 37 years old, came to our hospital with shortness of breath and chest discomfort. Physical examination showed diaphoresis, blood pressure was 80/60 mmHg with heart rate was 120 bpm, rales was heard in one third of lung field with full inotrope and vaso pressure support. ECG showed SR, QRS rate was 120x/min and old LBBB. During observation in emergency room patient suffered ventricular fibrillation and was successfully treated with 5x 200 J biphasic defibrilliation and fully sedated intubation. Patient was moved to the Intensive Cardiovascular Care Unit (ICVCU) for further intervention and treatment

In ICVCU, patients suffered refractory cardiac arrest and arrhythmias storm, ventricular tachycardia and ventricular fibrillation. Rescucitation was performed with CPR machine, the storm was treated and reduced with amiodarone, lydocain, and electrolyte correction. Intra Aortic Balloon Pump was inserted for hemodynamic support. After advanced stabilization effort, patient was moved to the cathlab for angiogram and intervention.

Angiogram showed CAD 3 VD with multiple and severe lesion, the Cardiac Team was made decision that CABG was not recommended for this lesion, selective and high risk PCI was the only one option . In ICvCU patient still refractory cardiac arrest and rescucitated until 3 hours, brain cooling was performed with cooled blanket equipment. Temperature was set for mild hypothermia, 34-35 degree celcius for 24 hours.

After 24h cooling, he sent to cathlab for selective PCI (percutaneous coronary intervention). After successful PCI, patient was conscious and no arrhythmic storm with stable hemodynamic in day 4. Finally, patient was stable in ward and discharge with optimal heart failure medication such as ACE-I, betablocker and Ivabradine in day 9.

Conclusion

Male, 37 years old with severe deadly heart failure and refractory cardiac arrest was successfully stabilized and treated with recurrent defibrillation, CPR machine, hypothermia therapy, revascularization, and certain optimal heart failure medication.