

## ABSTRACT

Hypertension is one of cardiovascular diseases that can cause morbidity and mortality. It covers 31.7% of people with hypertension in Indonesia. Hypertension can cause changes in the anatomy and/or function of the heart, that may danger people's life. The changes itselfs can be diagnosed with electrocardiography (ECG), the most common used and non-invasive device. Based on that background, the objective of this study is to recognize the ECG profile of hypertension patients in Cardiology Outpatient Clinic RSUD Dr. Soetomo Surabaya within the period of 1<sup>st</sup> until 31<sup>st</sup> March 2015. The design of this study was observational descriptive study. The samples were obtained through primary and secondary data from patients' medical history from patients within the period of 1<sup>st</sup> until 31<sup>st</sup> March 2015 between 11.30 AM – 02.00 PM GMT7+ (west Indonesia time zone). There were 140 hypertension patients throughout this study period. Two ECG results showed left ventricular hypertrophy and 138 ECG results showed other than left ventricular hypertrophy, such as arrhythmia and atrial fibrillation. The prevalence of hypertension was the same between men and women. The highest prevalency of hypertension was in age 51 to 60. There were two left ventricular hypertrophy ECG results found, both were in men, 55<sup>th</sup> and 61<sup>st</sup> years old. The spesific thing found in both ECG results that shows left ventricular hypertrophy is the sum of S wave in V1 lead and R wave in V5/V6 (choose the higher) is more than 35 mm.

**Keyword:** *hypertension, ECG, left ventricular hypertrophy*

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## DAFTAR SINGKATAN

|           |   |                                     |
|-----------|---|-------------------------------------|
| AF        | : | <i>atrial fibrillation</i>          |
| aVF       | : | <i>augmented vector foot</i>        |
| aVL       | : | <i>augmented vector left</i>        |
| aVR       | : | <i>augmented vector right</i>       |
| AV        | : | atrioventrikular                    |
| CFR       | : | <i>Case Fatality Rate</i>           |
| Depkes    | : | Departemen Kesehatan                |
| DM        | : | diabetes mellitus                   |
| EKG       | : | elektrokardiogram                   |
| HDL       | : | <i>High Density Lipoprotein</i>     |
| IMT       | : | indeks massa tubuh                  |
| LDL       | : | <i>Low Density Lipoprotein</i>      |
| LVH       | : | <i>left ventricular hypertrophy</i> |
| PJK       | : | penyakit jantung koroner            |
| PKV       | : | penyakit kardiovaskular             |
| PTM       | : | penyakit tidak menular              |
| PPOK      | : | penyakit paru obstruktif kronis     |
| Riskesdas | : | Riset Kesehatan Dasar               |
| SA        | : | sinoatrial                          |
| TDD       | : | tekanan darah diastolik             |
| TDS       | : | tekanan darah sistolik              |
| WHO       | : | <i>World Health Organization</i>    |