About the Normal Range in the Addition Leads (V3R, V4R, V5R, V7, V8, V9) When We Used Synthesized 18 Leads ECG

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Background: 12-lead electrocardiograms (ECGs) provide insufficient information for the accurate diagnosis of posterior and/or right ventricular disease. Posterior chest leads (V7-V9) and/or right-sided precordial leads (V3R-V5R) provide important information from those specific areas, but these additional ECGs are not routinely recorded because of the time-consuming procedure involved. The purpose of the present study was to evaluate a newly developed system to synthesize these 6 additional lead ECGs non-invasively using standard 12-lead ECG information. Method: We use 11,551 ECGs continuations that visited a medical examination and, recorded electrocardiography. We synthesized 18 leads ECGs about a precedent. We measure Q wave width, ST level, T wave height automatically and investigate distribution. Result: Generally, said ST level 1mm, negative T wave 1mm, Q wave width 1mm to the threshold. As a result, we became less than approximately 1% other than the T amplitude and Q wave width in the right chest lead. Conclusion: Synthesized posterior and right-sided precordial lead ECGs appear to be highly reliable and useful in the rapid diagnosis, especially in the early detection of posterior and/or right ventricular involvement, thereby alleviating patient distress. Keywords: synthesized electrocardiogram, posterior chest leads, right-sided chest leads