

ABSTRAK

Latar Belakang : Fibrilasi Atrium Perioperatif (FAPO) merupakan salah satu bentuk Fibrilasi Atrium sekunder yang disebabkan oleh tindakan intervensi bedah jantung, khususnya Bedah Pintas Arteri Koroner. *P-wave Dispersion (Pdis)* merupakan hasil pengurangan antara durasi gelombang P terpanjang dan terpendek yang diukur dari 12 lead EKG. *P-wave Dispersion* diperkirakan menjadi penanda EKG yang non-invasif untuk remodelling atrium sehingga dapat digunakan sebagai prediktor terjadinya FA.

Tujuan : Studi ini bertujuan untuk menganalisis asosiasi antara *P-wave Dispersion* dan Fibrilasi Atrium Perioperatif pasca Bedah Pintas Arteri Koroner.

Metode : Jenis penelitian adalah observasional analitik dengan desain retrospektif. Total subjek berjumlah 48 pasien yang terbagi menjadi kelompok (n=24) FAPO dan kelompok non FAPO (n=24). Data demografis dan rekam Elektrokardiogram (EKG) periode pra operasi diperoleh dari rekam medis pasien. Signifikansi *P-wave dispersion* dianalisis menggunakan *independent t-test*, kurva ROC, dan regresi logistik.

Hasil : Total subjek dalam penelitian ini berjumlah 48 pasien. Rerata *P-wave Dispersion* lebih tinggi pada pasien yang mengalami FAPO dibandingkan dengan yang tidak mengalami FAPO ($64,97 \pm 13,21$ vs. $50,55 \pm 7,14$, $p < 0,001$). *P-wave Dispersion* secara signifikan berasosiasi dengan kejadian FAPO ($p < 0,001$; *cut-off* 55,65 ms; OR 9,00; 95% CI 2,437-33,244).

Kesimpulan : *P-wave Dispersion* secara signifikan berasosiasi dengan kejadian FAPO.

Kata Kunci : *P-wave Dispersion*, Fibrilasi Atrium Perioperatif, Bedah Pintas Arteri Koroner

ABSTRACT

Background : Perioperative Atrial Fibrillation (POAF) is a secondary Atrial Fibrillation (AF) caused by cardiac surgical intervention, especially Coronary Artery Bypass (CABG) Surgery. P-wave Dispersion (Pdis) is difference between the longest and shortest P-waves duration measured from the 12-lead ECG. P-wave Dispersion is considered a non-invasive ECG marker for atrial remodeling, thus it can predicts AF occurrence.

Aim : This study analyzes the association between P-wave Dispersion and Perioperative Atrial Fibrillation after Coronary Artery Bypass Graft Surgery

Method : This was an observational analytic study with a retrospective design. The total number of subjects was 48 patients, divided into the POAF group (n=24) and the non POAF group (n=24). Demographic data and electrocardiogram (ECG) records for the preoperative period were obtained from the patient's medical records. The significance of P-wave dispersion was analyzed using independent t-test and logistic regression.

Results : The total subjects in this study were 48 patients, consisting of 43 men and five women. The mean age of the patients was 57.85 ± 5.83 years. The mean P-wave Dispersion was higher in patients who developed POAF ($64,97 \pm 13,21$ vs. $50,55 \pm 7,14$, $p < 0,001$). P-wave Dispersion was significantly associated with the incidence of POAF ($p < 0,001$; cut-off $55,65$ ms; OR 9,00; 95% CI 2,437-33,244).

Conclusion : P-wave Dispersion is significantly associated with Postoperative Atrial Fibrillation.

Keywords : P-wave Dispersion, Postoperative Atrial Fibrillation, Coronary Artery Bypass Graft