

## **Korelasi Antara CHA<sub>2</sub>DS<sub>2</sub>-VASC-HS Score dengan Kompleksitas Lesi Pembuluh Darah Koroner Berdasarkan SYNTAX Score**

Gusti Ayu Rai Prawisanti, Yudi Her Oktaviono

### **ABSTRAK**

**Latar Belakang:** PJK masih menjadi penyebab utama kematian dan disabilitas di seluruh dunia. Berbagai upaya dilakukan untuk menekan angka kematian akibat PJK diantaranya dengan menemukan metode untuk mendeteksi dini adanya PJK dan menilai derajat keparahannya. CHADS<sub>2</sub> dan CHA<sub>2</sub>DS<sub>2</sub>-VASC score merupakan prediktor klinis risiko stroke pada fibrilasi atrial non valvular yang terdiri dari faktor risiko yang sama untuk perkembangan penyakit jantung koroner (PJK). Oleh karena itu, skor ini dapat memberikan informasi yang penting mengenai beratnya lesi arteri koroner. Untuk meningkatkan kemungkinan dalam menentukan keparahan PJK, CHA<sub>2</sub>DS<sub>2</sub>-VASC-HS score dibentuk dengan menambahkan komponen hiperlipidemia (HL) dan *smoking* (S) serta menggunakan jenis kelamin laki-laki pada variabel *sex category* (Sc)

**Tujuan:** Mendeskripsikan rerata SYNTAX score pada CHA<sub>2</sub>DS<sub>2</sub>-VASC-HS score dan menganalisis korelasi antara CHA<sub>2</sub>DS<sub>2</sub>-VASC-HS score dengan kompleksitas lesi pembuluh darah koroner berdasarkan SYNTAX score

**Metode:** Penelitian ini adalah penelitian analitik observasional dengan pendekatan *cross sectional*. Empat puluh lima pasien yang menjalani angiografi koroner elektif dikumpulkan secara *purposive sampling*. Dilakukan penghitungan CHA<sub>2</sub>DS<sub>2</sub>-VASC-HS score dari faktor risiko yang dimiliki pasien dan SYNTAX score dari hasil angiografi koroner pasien

**Hasil :** rerata CHA<sub>2</sub>DS<sub>2</sub>-VASC-HS score pada subjek penelitian adalah  $4 \pm 1,34$  dan rerata SYNTAX score adalah  $27,47 \pm 12,47$ . Terdapat korelasi positif, moderat dan bermakna antara CHA<sub>2</sub>DS<sub>2</sub>-VASC-HS score dengan SYNTAX score,  $r=0,682$  dan  $p=0,000$  ( $p<0,05$ ). Semakin tinggi nilai CHA<sub>2</sub>DS<sub>2</sub>-VASC-HS score maka semakin tinggi nilai SYNTAX score. Pasien dengan CHA<sub>2</sub>DS<sub>2</sub>-VASC-HS score  $\geq 4$  memiliki rerata SYNTAX score  $>33$ , sedangkan Pasien dengan CHA<sub>2</sub>DS<sub>2</sub>-VASC-HS score  $<4$  memiliki rerata SYNTAX score  $<22$

**Kesimpulan:** Pasien dengan CHA<sub>2</sub>DS<sub>2</sub>-VASC-HS score  $\geq 4$  memiliki rerata SYNTAX score  $>33$ , sedangkan Pasien dengan CHA<sub>2</sub>DS<sub>2</sub>-VASC-HS score  $<4$  memiliki rerata SYNTAX score  $<22$ . Didapatkan korelasi yang bermakna, positif dan moderat antara CHA<sub>2</sub>DS<sub>2</sub>-VASC-HS score dan SYNTAX score.

**Kata Kunci:** CHA<sub>2</sub>DS<sub>2</sub>-VASC-HS score, SYNTAX score, kompleksitas lesi pembuluh darah koroner.

## **Correlation of CHA<sub>2</sub>DS<sub>2</sub>-Vasc-HS Scores with Coronary Artery Lesions Complexity Based On SYNTAX Score**

Gusti Ayu Rai Prawisanti, Yudi Her Oktaviono

### **ABSTRACT**

**Background:** Coronary artery disease (CAD) is a leading cause of morbidity and mortality worldwide. Various attempts were made to reduce the death rate from CHD, among them by finding a method to detect the early presence and assess the severity of CHD. CHADS<sub>2</sub> and CHA<sub>2</sub>DS-Vasc score is a clinical predictor of risk of stroke in non-valvular atrial fibrillation, which consists of the same risk factors for the development of coronary heart disease (CHD). Therefore, this score can provide important information about the severity of coronary artery lesions. To increase the likelihood of determining the CHD severity, CHA<sub>2</sub>DS<sub>2</sub>-Vasc-HS is formed by adding hyperlipidemia (HL) and smoking (S) as well as using the male gender in sex variable category (Sc)

**Objective:** To describe the mean SYNTAX score in CHA<sub>2</sub>DS<sub>2</sub>-Vasc-HS Score and analyze the correlation between CHA<sub>2</sub>DS<sub>2</sub>-Vasc-HS score with the complexity of coronary artery lesions based on SYNTAX Score

**Methods:** This study is observational analytic research with cross sectional approach. Forty-five patients who underwent elective coronary angiography were collected by purposive sampling. CHA<sub>2</sub>DS<sub>2</sub>-Vasc-HS scores from patient risk factors and SYNTAX score from the coronary angiogram were calculated.

**Results:** The mean CHA<sub>2</sub>DS<sub>2</sub>-Vasc-HS score in this study was  $4 \pm 1.34$  and the mean SYNTAX score was  $27.47 \pm 12.47$ . There is a positive, moderate and significant correlation between CHA<sub>2</sub>DS<sub>2</sub>-Vasc-HS score with SYNTAX score,  $r = 0.682$  and  $p = 0.000$  ( $p < 0.05$ ). Patients with CHA<sub>2</sub>DS<sub>2</sub>-Vasc-HS score  $\geq 4$  had a mean SYNTAX score  $> 33$ , while patients with CHA<sub>2</sub>DS<sub>2</sub>-Vasc-HS score  $< 4$  had a mean SYNTAX score  $< 22$

**Conclusion:** Patients with CHA<sub>2</sub>DS<sub>2</sub>-Vasc-HS score  $\geq 4$  had a mean SYNTAX score  $> 33$ , while patients with CHA<sub>2</sub>DS<sub>2</sub>-Vasc-HS score  $< 4$  had a mean SYNTAX score  $< 22$

There were significant, positive and moderate correlations between CHA<sub>2</sub>DS<sub>2</sub>-Vasc-HS Score and SYNTAX score.

**Keywords:** CHA<sub>2</sub>DS<sub>2</sub>-Vasc-HS score, CHD risk factors, SYNTAX score, the complexity of coronary artery lesions