Korelasi skor kalsium arteri koronaria dengan ketebalan tunika intima media dan nilai resistive index arteri karotis komunis bilateral menggunakan ultrasonografi Doppler = Correlation between coronary artery calcium score with bilateral common carotid intima media thickness and resistive index using Doppler Ultrasonography

Gupita Nareswari, author

Abstrak

[ABSTRAK
Latar belakang : Penyebab kematian nomor tiga di Indonesia adalah Penyakit Jantung Koroner (PJK). PJK dapat dievaluasi dengan menilai skor Coronary Artery Calcium (CAC) menggunakan modalitas radiologi CT cardiac. Permasalahan saat ini adalah modalitas CT cardiac tidak tersedia di semua institusi kesehatan, sehingga dibutuhkan modalitas lain yang berguna untuk skrining skor CAC menggantikan modalitas CT cardiac. Dari 4 modalitas yang dapat mendeteksi skor CAC,pemeriksaan USG Doppler arteri karotis komunis merupakan modalitas terpilih untuk melakukan skrining.

Tujuan : Menilai apakah terdapat korelasi antara skor CAC dengan nilai CIMT dan RI arteri karotis komunis menggunakan modalitas USG Doppler arteri karotis komunis.

Metode : Penelitian cross sectional ini menggunakan data primer dari pasien yang menjalani pemeriksaan CT cardiac dengan temuan skor CAC. Subjek penelitian yang masuk ke dalam kriteria penerimaan kemudian dilakukan pemeriksaan USG Doppler arteri karotis komunis bilateral dan dilakukan pengukuran terhadap nilai CIMT dan nilai RI.

Hasil : Jumlah subjek penelitian adalah 27 orang, dengan hasil terdapat korelasi positif bermakna dengan nilai korelasi sedang antara skor CAC dan nilai CIMT maksimum dengan persamaan : skor CAC = -85.51 + 199.82 x nilai CIMT maksimum. Terdapat korelasi positif bermakna dengan nilai korelasi sedang antara skor CAC dan nilai RI arteri karotis komunis dengan persamaan : skor CAC = -503.53 + 849.00 x nilai RI.

Kesimpulan : Modalitas USG Doppler arteri karotis komunis pengukuran nilai CIMT dan nilai RI dapat digunakan sebagai modalitas skrining untuk memperkirakan skor CAC pada pasien.
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ABSTRACT
Background : Coronary artery disease (CAD) known as the third cause of morbidity in Indonesia. CAD can be evaluated using CAC scoring from CT cardiac. Nowadays the issue related to its availability, not all health institution has this modality. We need other modality imaging that can replace CT cardiac for screening CAC scoring. From 4 modalities imaging that can evaluated CAC scoring, common carotid artery Doppler ultrasonography is the modality of choice for screening.

Purpose : To evaluate correlation value between CAC scoring and carotid intima media thickness (CIMT)

and resistive index common carotid artery using Doppler ultrasonography.

Method : Cross sectional research using primary data CAC scoring from CT cardiac. All subject that met research?s criteria will have bilateral common carotid artery Doppler ultrasonography measurement of CIMT and common carotid artery resistive index value.

Result : Total subject is 27 people. There is a positive correlation with medium correlation value between CAC scoring and maximum CIMT using this approach : CAC scoring = -85.51 + 199.82 x maximum CIMT value. There is also a positive correlation with medium correlation value between CAC scoring and common carotid artery resistive index value using this approach : CAC scoring = -503.53 + 849.00 x resistive index value.

Conclusion : Common carotid artery Doppler ultrasonography measurement of CIMT and common carotid artery resistive index value is a promising screening modality to predict patient?s CAC scoring.,
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