Korelasi spektral USG doppler tungkai dengan skor pedis berat pada ulkus kaki diabetik = Correlation between doppler leg ultrasound and severe pedis score on diabetic foot ulcers

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Abstrak

Latar belakang: Ulkus Kaki diabetik atau Diabetic Foot Ulcer merupakan salah satu komplikasi yang berat, karena sering kali ulkus kaki diabetik berakhir dengan amputasi kecacatan dan kematian. USG Doppler merupakan modalitas yang mudah tersedia dan non invasif untuk evaluasi arteri ekstremitas inferior dan dapat mendeteksi tingkat keparahan gangguan aliran darah atau Penyakit Arteri Perifer (PAP) dengan sensitivitas 42,8% dan spesifisitas 97,5%. WHO merekomendasikan klasifikasi Perfusion, Extent/Size, Depth/Tissue Loss, Infection, Sensation (PEDIS) sebagai sarana penegakan diagnosis dan membantu menentukan tatalaksana kaki diabetik. Penelitian ini dilakukan untuk melihat korelasi skor PEDIS dalam menilai gangguan aliran arteri tungkai berdasarkan spektral USG Doppler pada penderita ulkus kaki diabetik di RS Cipto Mangunkusumo Jakarta. Subjek dan Metode: Subjek penelitian adalah pasien ulkus kaki diabetes yang dirawat di Divisi Bedah Vaskular dan Endovaskular FKUI-RS Cipto Mangunkusumo Jakarta dan memenuhi kriteria inklusi dan eksklusi. Penelitian ini dilakukan dengan perhitungan menggunakan sensitivitas estimasi sebesar 80%, error absolut (d=5%), prevalensi estimasi 51,8% maka besar sampel minimal adalah 76. Setelah itu diperoleh data berupa skor PEDIS dan hasil spektral USG pada arteri femoralis, arteri poplitea, arteri dorsalis pedis dan arteri tibialis posterior. Penelitian ini mengumpulkan 81 orang subjek dengan 52 orang (64%) jenis kelamin laki-laki, 29 orang (36%) perempuan dan rata-rata usia 59,8+10,5 tahun. Profil gula darah sewaktu subjek median 265 mg/dl dengan kisaran antara 105-571 mg/dl. Pada tabel 3 dalam menentukan Cut Off skor PEDIS menggunakan kurva ROC (Receiver Operating Characteristic), didapatkan Cut Off arteri poplitea >10, sedangkan arteri dorsalis pedis dan arteri tibialis posterior >8.

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Main topics: Diabetic Foot Ulcer or Diabetic Foot Ulcer is one form that is severe, because often diabetic foot ulcers end with disability amputation and death. Doppler ultrasound is an easily available and unlimited modality for lower limb risk and can detect the severity of arterial disease or peripheral arterial sensitivity (PAP) with a sensitivity of 42.8% and specificity of 97.5%. WHO that performs Data Perfusion, Area/Size, Depth/Tissue Loss, Infection, Sensation (PEDIS) as a means of enforcing the diagnosis and helps determine the management of diabetic foot. This study was conducted to look at the PEDIS score in assessing the disturbance of limb arterial flow based on Doppler ultrasound in patients with diabetic foot ulcer at Cipto Mangunkusumo Hospital, Jakarta. Subjects were patients with diabetic foot ulcers performed in the Division of Vascular and Endovascular Surgery of the Faculty of Medicine-Cipto Mangunkusumo Hospital Jakarta and fulfilled the inclusion and exclusion criteria. This research was conducted by calculating using an estimation sensitivity of 80%, absolute error (d = 5%), the largest prevalence of 51.8%, then the minimum sample size was 76. After that data was obtained in the form of PEDIS scores and spectral results of ultrasound in the femoral artery, arteries poplitea, dorsalis pedis artery and posterior tibial artery. This study collected 81 subjects with 52 people (64%) male gender, 29 people (36%) women and an average of 59.8 +

10.5 years. The blood sugar profile was median 265 mg/dl with a range of 105-571 mg/dl. In table 3 in determining the PEDIS score Cut-Off using the Receiver Operating Characteristic curve, obtained Cut-ff popliteal artery> 10, while the dorsalis pedis artery and posterior tibial artery> 8.