Korelasi pengukuran estimated GFR metode MDRD dan CKD-EPI dengan pengukuran GFR 99mTC-DTPA metode Gates pada pasien CKD di RSUPN Cipto Mangunkusumo = Correlation of the estimated GFR measurements using MDRD and CKC-EPI methods with Gates methods using 99mTc-DTPA in CKD patients at Cipto Mangunkusumo Hospital jakarta

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Abstrak

[ABSTRAK
Latar belakang: Penggunaan media kontras pada pemeriksaan radiologi dengan kondisi pasien mengalami insufisiensi fungsi ginjal dapat menyebabkan resiko terjadinya CIN pada kontras iodine dan NSF pada kontras paramagnetik. Oleh karena itu, penilaian fungsi ginjal penting dilakukan sebelum pemeriksaan radiologi kontras. Permasalahannya untuk menilai fungsi ginjal dengan baku emas sulit dilakukan sehingga digunakan formula MDRD dan CKD-EPI untuk menghitung eGFR. Faktor ras menjadi salah satu variabel dalam formula penghitungan eGFR, belum ada untuk populasi Indonesia yang termasuk ras Melanesia dan Malayan-Mongoloid. Tujuan: Menilai apakah terdapat korelasi antara pengukuran eGFR metode MDRD dan CKD-EPI dengan pengukuran GFR 99mTc-DTPA metode Gates pada pasien CKD. Metode: Penelitian potong lintang menggunakan data sekunder pasien yang menjalani pemeriksaan skintigrafi renal di RSUPN Cipto Mangunkusumo serta pemeriksaan kreatinin serum bulan Februari 2012-Januari 2015. Data kasar dinilai ulang GFR skintigrafi renal menggunakan metode Gates dari pesawat Siemens Symbia T2 dan dihitung nilai eGFR menggunakan formula MDRD dan CKD-EPI. Analisa data dilakukan untuk mendapatkan nilai korelasi eGFR formula MDRD dan CKD-EPI dengan GFR skintigrafi renal sebagai baku emas. Hasil: Jumlah subjek penelitian 47 orang, dengan hasil terdapat korelasi positif, kekuatan korelasi baik antara nilai eGFR MDRD dengan GFR skintigrafi renal dengan persamaan:nilai GFR skintigrafi renal=16,60+0,70xnilai eGFR MDRD. Terdapat korelasi positif, kekuatan korelasi baik antara nilai eGFR CKD-EPI dengan GFR skintigrafi renal dengan persamaan:nilai GFR skintigrafi renal=12,74+0,78xnilai eGFR CKD-EPI; nilai GFR dalam ml/menit/1,73m2. Kesimpulan : Formula persamaan eGFR MDRD dan CKD-EPI dapat digunakan dalam klinis untuk memperkirakan nilai GFR skintigrafi renal.
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ABSTRACT
Background: The use of contrast media for radiology examination in patients with renal function insufficiency can lead to the risk of CIN (Contrast Induced Nephropathy) on contrast iodine and NSF (Nephrogenic Systemic Fibrosis) on paramagnetic contrast. Therefore, assessment of renal function is important to be done prior to contrast radiology. The problem is assessing renal function with a gold standard, clinically difficult, therefor using MDRD and CKD-EPI formula to calculate eGFR. Factors race became one of the variables in the formula calculating eGFR, yet for Indonesian population included in the Melanesian and Malayan-Mongoloid race.Objective. To evaluate correlation value between eGFR measurement using MDRD and CKD-EPI methods with GFR Gates methods using 99mTc-DTPA in patients with CKD.Method: Cross sectional research using secondary data of patients who underwent renal

scintigraphy in Cipto Mangunkusumo and serum creatinine examination in February 2012 to January 2015. The raw data then reassessed GFR renal scintigraphy using the Gates of Siemens Symbia T2 machine and eGFR values calculated using the formula MDRD and CKD-EPI. Data analysis was used to obtain a correlation value formula MDRD eGFR and CKD-EPI with GFR renal scintigraphy as the gold standard. Result: Total subject is 47 people. There is a positive correlation with good correlation value between MDRD eGFR value and renal scintigraphy GFR using this approach:renal scintigraphy GFR value=16,60+0,70xMDRD eGFR value. There is also a positive correlation with good correlation value between MDRD eGFR value and renal scintigraphy GFR value using this approach:renal scintigraphy GFR value=12,74+0,78xCKD=EPI eGFR value. Conclusion : Formula equation MDRD and CKD-EPI eGFR can be used clinically to estimate renal scintigraphy GFR, Background: The use of contrast media for radiology examination in patients with renal function insufficiency can lead to the risk of CIN (Contrast Induced Nephropathy) on contrast iodine and NSF (Nephrogenic Systemic Fibrosis) on paramagnetic contrast. Therefore, assessment of renal function is important to be done prior to contrast radiology. The problem is assessing renal function with a gold standard, clinically difficult, therefor using MDRD and CKD-EPI formula to calculate eGFR. Factors race became one of the variables in the formula calculating eGFR, yet for Indonesian population included in the Melanesian and Malayan-Mongoloid race.Objective. To evaluate correlation value between eGFR measurement using MDRD and CKD-EPI methods with GFR Gates methods using 99mTc-DTPA in patients with CKD.Method: Cross sectional research using secondary data of patients who underwent renal scintigraphy in Cipto Mangunkusumo and serum creatinine examination in February 2012 to January 2015. The raw data then reassessed GFR renal scintigraphy using the Gates of Siemens Symbia T2 machine and eGFR values calculated using the formula MDRD and CKD-EPI. Data analysis was used to obtain a correlation value formula MDRD eGFR and CKD-EPI with GFR renal scintigraphy as the gold standard. Result: Total subject is 47 people. There is a positive correlation with good correlation value between MDRD eGFR value and renal scintigraphy GFR using this approach:renal scintigraphy GFR value=16,60+0,70xMDRD eGFR value. There is also a positive correlation with good correlation value between MDRD eGFR value and renal scintigraphy GFR value using this approach:renal scintigraphy GFR value=12,74+0,78xCKD=EPI eGFR value. Conclusion : Formula equation MDRD and CKD-EPI eGFR can be used clinically to estimate renal scintigraphy GFR]