ABSTRAK

HUBUNGAN KADAR VITAMIN D DENGAN FUNGSI DIASTOLIK VENTRIKEL KIRI PADA PASIEN SINDROM METABOLIK

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Latar belakang :

Pada sindrom metabolik dapat mengalami defisiensi vitamin D karena peningkatan kadar vitamin D di jaringan adiposa. Defisiensi vitamin D menyebabkan berbagai komplikasi pada kardiovaskular, salah satunya gagal jantung. Pada gagal jantung, gangguan fungsi diastolik dapat mendahului gangguan fungsi sistolik, dan bisa juga terjadi secara bersamaan.

Metode :

Penelitian dengan desain cross sectional yang melibatkan 36 subjek dengan sindrom metabolik sesuai kriteria NCEP ATP III. Dilakukan pemeriksaan kadar vitamin D dan pemeriksaan ekokardiografi dengan menilai fungsi diastolik ventrikel kiri.

Hasil :

Dari 36 pasien sindrom metabolik, 16 subjek (44.4%) defisiensi vitamin D, 19 subjek (52.8%) insufisiensi vitamin D dan 1 subjek (2,8%) kadar vitamin D normal. Berdasarkan hasil Ekokardiografi, 6 subjek (16,7%) fungsi diastolik normal, 30 subjek (83,3%) disfungsi diastolik ventrikel kiri. Terdapat perbedaan signifikan kadar vitamin D (p=0.024) antara kelompok penelitian.

Kesimpulan :

Terdapat perbedaan bermakna antara kadar vitamin D dengan fungsi diastolik ventrikel kiri pada pasien sindrom metabolik.

Kata kunci : Sindrom Metabolik, Vitamin D, Fungsi Diastolik Ventrikel Kiri

ABSTRACT

RELATIONSHIP BETWEEN VITAMIN D LEVELS AND LEFT VENTRICLE DIASTOLIC FUNCTION PROFILE IN PATIENTS WITH METABOLIC SYNDROME

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Background :

In the metabolic syndrome, vitamin D deficiency due to increased levels of vitamin D in adipose tissue. Vitamin D deficiency causes various cardiovascular complications, one of them is heart failure. In heart failure, impaired diastolic function may precede impaired systolic function, and may also occur simultaneously.

Method :

This research with cross-sectional design involving 36 subjects with metabolic syndrome according to NCEP ATP III criteria. Then examination of vitamin D levels was carried out and echocardiographic examination by assessing left ventricular diastolic function was carried out too.

Results :

Of the 36 patients with metabolic syndrome, 16 subjects (44.4%) were deficient in vitamin D, 19 subjects (52.8%) had vitamin D insufficiency and 1 subject (2.8%) had normal vitamin D levels. Based on echocardiographic results, 6 subjects (16.7%) had normal diastolic function, and 30 subjects (83.3%) diastolic dysfunction. There was significant difference in vitamin D levels ($p=0.024$) between study groups.

Conclusion :

There was significant difference between vitamin D levels and left ventricular diastolic function in patients with the metabolic syndrome.

Keywords : Metabolic Syndrome, Vitamin D, Left Ventricular Diastolic Function