



INTISARI

KADAR NITRIC OXIDE DARAH PADA GLAUKOMA TEKANAN NORMAL PREPERIMETRIK

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Tujuan:

Tujuan penelitian ini adalah membandingkan kadar nitric oxide darah pada pasien glaukoma tekanan normal preperimetrik dengan subyek bukan glaukoma.

Metode:

Penelitian ini menggunakan desain studi potong lintang (*cross-sectional*) dan dilakukan di RSUP Dr. Sardjito Yogyakarta pada bulan Januari – Agustus 2020. Subyek penelitian terdiri dari 2 kelompok yaitu kelompok glaukoma tekanan normal preperimetrik dan kelompok bukan penderita glaukoma. Subyek yang memenuhi kriteria penelitian dilakukan wawancara dengan kuesioner kemudian dilakukan pemeriksaan fisik, pemeriksaan oftalmologis, pemeriksaan OCT papil dan RNFL, pemeriksaan perimetri, dan pengambilan darah vena untuk pemeriksaan kadar NO pada serum darah. Perbedaan kadar NO darah antara kedua kelompok dinilai menggunakan uji rerata dua kelompok tidak berpasangan.

Hasil:

Penelitian ini diikuti oleh 15 subyek penderita glaukoma tekanan normal preperimetrik dan 15 subyek bukan penderita glaukoma. Rerata usia kelompok glaukoma tekanan normal preperimetrik 30.75 ± 7.50 tahun dan kelompok bukan penderita glaukoma 31.67 ± 6.04 tahun ($p=0.712$). Rerata kadar NO darah pada kelompok glaukoma tekanan normal preperimetrik 34.79 ± 10.29 $\mu\text{mol/L}$ dan pada kelompok bukan glaukoma 24.63 ± 2.64 $\mu\text{mol/L}$ dengan nilai $p < 0.001$.

Kesimpulan:

Pada penelitian ini, kadar nitric oxide darah pada subyek glaukoma tekanan normal preperimetrik usia muda lebih tinggi dibandingkan dengan subyek bukan glaukoma.

Kata Kunci

nitric oxide, disfungsi endotel, disregulasi vaskular, glaukoma tekanan normal preperimetrik



ABSTRACT

BLOOD NITRIC OXIDE IN PREPERIMETRIC NORMAL TENSION GLAUCOMA

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Purpose:

The aim of this study was to compare blood nitric oxide levels in preperimetric normal tension glaucoma patients with non-glaucoma subjects.

Methods:

This was a cross-sectional study conducted at Dr. Sardjito General Hospital Yogyakarta during January to August 2020. Subjects of the study were classified into 2 groups, the preperimetric normal tension glaucoma group and non glaucoma group. Subjects who met the research criteria were interviewed and then carried out a physical examination, ophthalmological examination, ONH and RNFL OCT examination, perimetric examination, and venous blood sampling to measure nitric oxide in blood serum. The difference in blood nitric oxide between the two groups was assessed using the mean test of two unpaired groups.

Result:

A total of 30 subjects were enrolled in this study, 15 subjects with preperimetric normal tension glaucoma and 15 non-glaucoma subjects. The mean age of preperimetric normal tension glaucoma group was 30.75 ± 7.50 years and the non-glaucoma group was 31.67 ± 6.04 years ($p = 0.712$). The mean blood nitric oxide in the preperimetric normal tension glaucoma group was 34.79 ± 10.29 $\mu\text{mol} / \text{L}$ and in the non-glaucoma group 24.63 ± 2.64 $\mu\text{mol} / \text{L}$ ($p < 0.001$)

Conclusion:

In this study, blood nitric oxide in young preperimetric normal tension glaucoma subjects were higher than those in non-glaucoma subjects.

Keywords:

nitric oxide, endothelial dysfunction, vascular dysregulation, preperimetric normal tension glaucoma