Efek Injeksi Bevacizumab Intravitreal terhadap Kadar Cystatin C Plasma pada Age Related Macular Degeneration Neovaskular: Studi Pendahuluan = The Effects of Intravitreal Bevacizumab Injection on Plasma Cystatin C Levels in Neovascular Age Related Macular Degeneration: A Preliminary Study.

Brenda Hayatulhaya, author

Abstrak

ABSTRAK
Tujuan: Mengevaluasi efek injeksi anti-VEGF intravitreal, bevacizumab, terhadap kadar cystatin C plasma dan VEGF plasma dan meninjau korelasi antara kedua faktor tersebut.
Metodologi: Penelitian ini merupakan studi eksperimental satu kelompok dengan sampel dipilih secara konsekutif dari populasi terjangkau. Pemeriksaan oftalmologi lengkap, tekanan darah, laboratorium darah perifer lengkap, dan pemeriksaan kadar cystatin C plasma dan VEGF plasma dilakukan pada subjek sebelum injeksi dan 14 hari pasca injeksi bevacizumab intravitreal dosis 1,25 mg (0,05 cc).
Hasil: 33 subjek dilibatkan dalam penelitian ini. Dari seluruh subjek, 63,6% adalah perempuan dan 36,4% adalah laki-laki dengan usia rata-rata 66,4 ± 8,3 tahun. Tidak terdapat perbedaan bermakna secara statistik antara kadar VEGF plasma pre dan pasca injeksi (p=0,339). Tidak terdapat perbedaan bermakna secara statistik antara kadar cystatin C plasma pre dan pasca injeksi (p=0,709). Uji korelasi antara perubahan VEGF plasma dengan perubahan cystatin C plasma pre dan pasca injeksi menunjukkan korelasi yang tidak bermakna (p=0,142).
Kesimpulan: Kadar cystatin C plasma tidak berubah secara signifikan pre dan pasca injeksi bevacizumab pada injeksi satu kali. Tidak ditemukan adanya korelasi antara penurunan kadar VEGF plasma dengan peningkatan kadar cystatin C pada pasien AMD neovaskuler pasca injeksi bevacizumab.
<hr>
ABSTRACT
Objective: To evaluate the effect of intravitreal bevacizumab injection on plasma cystatin C and plasma VEGF levels and the correlation between the two factors.
Methodology: This research was a single arm study with samples selected consecutively from an assigned population. Ophthalmology examinations, blood pressure, complete blood count, and assessments of plasma cystatin C and plasma VEGF levels were carried out on subjects before and 14 days after intravitreal bevacizumab injection of 1.25 mg (0.05 cc).
Results: 33 subjects were included in this study. Of all subjects, 63.6% were women and 36.4% were men with an average age of 66.4±8.3 years. There was no statistically significant difference between pre and post injection plasma VEGF and plasma cystatin C levels (p=0.339 and 0.709 respectively). Correlation test between changes in plasma VEGF with changes in plasma cystatin C pre and post injection showed no significant correlations (p=0.142).
Conclusion: Plasma cystatin C levels did not change significantly before and after injection of bevacizumab on one-time injection. No correlation was found between decreasing plasma VEGF levels and increasing levels of cystatin C in patients with neovascular AMD after bevacizumab injection.