Kadar Malondialdehida Plasma dan faktor-faktor yang berhubungan pada laki-laki Etnik Minangkabau

Delmi Sulastri, author

Abstrak

Tujuan :
1. Diketahuinya kadar malondialdehida (MDA) plasma subyek penelitian
2. Diketahuinya faktor-faktor yang berhubungan dengan MDA plasma pada subyek penelitian.

Tempat : Poliklinik umum Rumah Sakit Umum Pusat Padang (RSUP).

Metodologi : Penelitian dengan desain cross sectional dilakukan pada 96 orang pasien baru laki-laki etnik Minangkabau. Pasien berusia 30 - 59 tahun yang memenuhi kriteria penerimaan dan penolakan dipilih secara consecutive sampling. Data yang dikumpulkan terdiri dari karakteristik demografi, asupan makanan dengan menggunakan metode semi quantitative food frequency questionnaire (FFQ) dan recall 2x24 jam, pengukuran antropometri dan pemeriksaan laboratorium profil lipid, gula darah puasa dan MDA plasma.

Hasil Rerata umur subyek penelitian adalah 45 ± 7,5. Terdapat korelasi positif bermakna antara asupan lemak total dengan kadar kolesterol total (-r--0,268, p=0,008), LDL (r^ 0,258. p= 0,0I 1), HDL (r,280, p-31,006). ALJ menunjukkan korelasi positif bermakna dengan kadar kolesterol total (r= 0,272, p--0,007), LDL (r=0,266, p4ti,009) dan HDL (r=0,276, p= 0.006). Asupan ALTJT menunjukkan korelasi yang bermakna dengan kadar HDL plasma (1.0,240, p=0,018). Terdapat korelasi negatif bermakna antara asupan vitamin C dengan dengan kadar MDA plasma (r = -0,336, p = 0,001) dan vitamin E dengan kadar MDA plasma subyek penelitian (r=-0,236, p=D,020). Hasil analisis multivariat menunjukkan asupan lemak total merupakan faktor yang paling berperan terhadap kadar kolesterol total plasma (p = 0,058), asupan lemak jenuh mempunyai hubungan yang paling bermakna dengan kadar LDL (p= 0,006), asupan ALTJT menunjukkan hubungan yang paling bermakna dengan kadar HDL (p= 0,009).

Kesimpulan : Asupan antioksidan dan. serat masih kurang dari jumlah yang dianjurkan sedangkan asupan AU lebih dari jumlah yang dianjurkan. Faktor ini diduga yang menyebabkan prevalensi PJK tinggi pada etnik Minangkabau. Terdapat korelasi positif antara asupan lemak total dan ALJ dengan kadar kol.total, LDL dan HDL, sedangkan ALTJT mempunyai korelasi positif dengan kadar HDL. Asupan vitamin C dan vitamin E mempunyai korelasi negatif dengan kadar MDA plasma.
<hr><i>Objective :
1. To study the plasma Malondialdehyde (MDA) concentration
2. To study the factors associated with plasma MDA

Place : Clinics of Central General Hospital in Padang

Method: A cross sectional study was carried out among 96 new male patients, age 30 - 59 years old, Minangkabau ethnic, who fulfilled the inclusion and exclusion criteria and were selected by consecutive sampling . Data collected were demographic characteristics, food intake using semi quantitative FFQ and two days 24-hour recall method (fat, antioxidants and fiber intake), antropometric and laboratory. (lipid profile, fasting blood glucose and malondialdehyde concentration).

Results : Mean of age was 45 ± 7,5 years . There were significant positive correlations between total fat intake with total cholesterol (r=0,268, p4,008), LDL (r`- 0,258, p= 0,011), HDL (r.1,280, SFA intake showed significant positive correlation with total cholesterol (r 0,272, p=0,007), LDL (r-0,266, p~,009) and HDL (r-4,276, p= 0.006). There was significant positive correlations between MUFA intake and HDL (r~,240, p=0,018). There were significant negative correlations between vitamin C and vitamin E intakes with plasma MDA (r = -0,336, p = 0,001 ; r=0,236, p=0,020), There was difference of mean plasma MDA level between different levels of vitamin C intake (p=0,001). The result of multivariat analisis showed total fat intake mostly association with plasma total cholesterol (p" 0,058), SFA intake most associated with LDL (p 0,006) and MUFA intake most associated with HDL (p:1,009).

Conclusion : Intake of antioxidants and fiber were still below the recommendation while total SFA was higher than recommended. These factors might be the cause of cardiovascular disease in Minangkabau ethnic.There were significant positive correlation between total fat and SFA intake with total cholesterol total ,LDL, HDL. There were significant positive correlation between MUFA intake and HDL There were significant negative correlation between vitamin C and vitamin E intake with dengan MDA plasma.</i>