Pengaruh Rokok Terhadap Kadar Protein S Pada Penderita Strok Iskemik Akut = Effect of Cigarettes on Protein S Levels in Acute Ischemic Stroke Sufferers

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Abstrak

Merokok merupakan masalah kesehatan masyarakat di dunia, menurut World Health Organization (WHO 1988), kebiasaan merokok cenderung meningkat akhir-akhiir ini yaitu 50% pada laki-laki dan 8% pada wanita. Rokok adalah faktor risiko dari strok yang dapat dicegah (klasifikasi serebro vascular diasease III 1990), akan tetapi mekanisme rokok sebagai penyebab strok masih kontroversi. Barigarmenteria (1993) pada penelitianya menganggap rokok sebagai faktor risiko strok yang dapat menurunkan kadar protein S. Penelitian ini bertujuan untuk melihat pengaruh rokok terhadap penurunan kadar protein S pada strok iskemik fase akut. Penelitian dilakukan di Bagian Penyakit Saraf RSUPN-CM sejak bulan Mei 1996 sampai dengan Februari 1997 dengan disain kans kontrol pada 45 penderita strok iskemik akut perokok dan 45 penderita strok iskemik akut non perokok yang memenuhi kriteria inklusi. Semua penderita Paki-laki dengan rentang usia seluruh penderita 40 74 tahun. Pemeriksaan protein S dilakukan pada fase akut selambat-lambatnya hari keenam setelah serangan, menggunakan metode koagulometrik. Nilai standard protein 3 untuk orang Indonesia 76% 121,2%. Penilaian hasil aktifitas kadar protein S menurun bila nilai kurang dari 76%. Rerata usia pada kasus 57,2 ± 7,5, tahun dan rerata usia kontrol 56,9 ± 7,9 tidak terdapat perbedaan yang bermakna antara usia kasus dan kontrol (p=0,421). Rerata lama merokok 15,6 ± 8 talaan, 71% (32 orang) merokok lebih dari 10 tahun dan 28,8% (13 orang), merokok kurang dari 10 tahun, didapatkan perbedaan yang bermakna penurunan aktifitas protein S antara kasus dan kontrol (X 11,37, p-0,0018; Ratio Odds 11,2). Rerata jumlah rokok yang dikonnanai perhari 15 ± 8 batang perhari, 35,5% (16 orang) merokok lebih dari 20 batang perhari, 64,4% (29 orang) merokok kurang dari 20 batang perhari (X^2-4,45; p 0,0349, Ratio Odds-7,89). Semua penderita perokok kretek, 26,78% (12 orang) perokok kretek filter dan 73,3% (33 orang) perokok kretek non filter. Tidak didapatkan perbedaan bermakna perokok kretek filter dan non kretek filter (X=0,72; p = 0,403). Didapatkan penurunan aktifitas kadar protein S yang bermakna pada kasus dibanding dengan kontrol (Ratio Odds 14,3). Rata-rata aktifitas kadar protein S pada kasus 50,6% dan rata-rata pada kontrol 85,5%, terlihat perbedaan yang bermakna dengan uji t-test 7,5; p 0,0001. Tujub puluh lima persentil aktifitas kadar protein S menurun dibawah nilai standard normal pada kasus dan hanya lima belas persentil pada kontrol. Lama merokok dan jumlah rokok yang dikonsumsi setiap hari mempunyai pengaruh yang bermakna terhadap penurunan aktifitas kadar protein S (t-test-4,25; p- 0,0001; 95% CI 15,5-45,7) dan (t-test = 2,65; p=0,011; 95% CT 4,1-30,2.

.....Smoking is a public health problem in the world, according to the World Health Organization (WHO 1988), smoking habits tend to increase recently, namely 50% in men and 8% in women. Cigarettes are a risk factor for preventable stroke (cerebro vascular disease classification III 1990), however the mechanism of smoking as a cause of stroke is still controversial. Barigarmenteria (1993) in his research considered smoking as a risk factor for stroke which can reduce protein S levels. This study aims to see the effect of smoking on reducing protein S levels in the acute phase of ischemic stroke. The research was conducted in the Neurological Diseases Department of RSUPN-CM from May 1996 to February 1997 with a control

design on 45 acute ischemic stroke sufferers who were smokers and 45 sufferers of acute ischemic stroke who were non-smokers who met the inclusion criteria. All Paki sufferers were male with an age range of 40 to 74 years. Protein S examination is carried out in the acute phase no later than the sixth day after the attack, using the coagulometric method. The standard value of protein 3 for Indonesians is 76% 121.2%. Assessment of activity results means S protein levels decrease if the value is less than 76%. The mean age of cases was 57.2 ± 7.5 years and the mean age of controls was 56.9 ± 7.9. There was no significant difference between the ages of cases and controls (p=0.421). The average number of cigarettes consumed per day was 15 ± 8 cigarettes per day, 35.5% (16 people) smoked more than 20 cigarettes per day, 64.4% (29 people) smoked less than 20 cigarettes per day (X^2-4.45; p 0.0349, Odds Ratio-7.89). All sufferers were kretek smokers, 26.78% (12 people) were filter kretek smokers and 73.3% (33 people) were non-filter kretek smokers. There was no significant difference between filtered kretek and non-filtered kretek smokers (X=0.72; p = 0.403). There was a significant decrease in the activity of protein S levels in cases compared to controls (Odds Ratio 14.3). The average activity level of protein S in cases was 50.6% and the average in controls was 85.5%, showing a significant difference using the t-test of 7.5; p 0.0001. Seventy-fifth percentile activity levels of protein S decreased below normal standard values in cases and only fifteen percentiles in controls. Length of smoking and the number of cigarettes consumed each day had a significant influence on reducing the activity of protein S levels (t-test-4.25; p-0.0001; 95% CI 15.5-45.7) and (t-test = 2.65; p=0.011; 95% CT 4.1-30.2.