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Serum homocysteine in deep venous thrombosis, peripheral atherosclerosis and healthy Iranians: A case-control study

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View references (٣١)

Abstract

This study was aimed to evaluate the association of serum homocysteine with peripheral atherosclerosis and deep vein thrombosis in an Iranian population complaining from vascular symptoms in lower limbs referred to a university general hospital in the capital of Iran. The study design was case-control. Deep vein thrombosis and atherosclerosis groups were, respectively consisted of ٢٥ patients presenting with signs and symptoms of deep vein thrombosis whom disease was confirmed by duplex ultrasonography and ٢٥ patients presenting with signs and symptoms of chronic arterial insufficiency who were candidate for arterial reconstruction whom disease was confirmed by angiography. The control group was consisted of ٢٥ persons selected among relatives accompanying the traumatic patients admitted in the general surgery ward of the same hospital. The age of atherosclerosis, DVT and control group were ٦١±١٤, ٤٧±١٦ and ٤٠±١٤, respectively. The serum level of homocysteine was higher in males (p<٠,٠١) except for atherosclerotic patients. The prevalence of high homocystene was ١٥٪ (control), ٣٦٪ (DVT) and ٥٦٪ (atherosclerosis) among females and ٧٥٪ (control), ٧٣٪ (DVT) and ٥٦٪ (atherosclerosis) among males. The serum homocysteme in the control group which was representative of Tehran population who do not take vitamin B supplements was unexpectedly high. It seems that fortification of popular foodstuffs should be considered for Tehran. The association between homocystene and atherosclerosis and deep vein thrombosis was not confirmed in this study especially for men who had higher serum homocysteine than women. It is possible that this association fades away in populations with high prevalence of hyperhomocysteinema. © ٢٠٠٩ Asian Network for Scientific Information.

Author keywords

Atherosclerosis; DVT; Fortification; Homocysteine; Iran

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