# Influence of Homocysteine on th Function of Native Arteriovenou Fistula in Hemodialysis Patients

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**Background.** *Vascular access (VA) for hemodialysis (HD) is crucial for the course of treatment and a good pr There have been numerous investigations of the influence of homocysteine (Hcy) on VA complications, but t is controversial. The present study of HD patients was designed to investigate the relationship between previo and the serum level of Hcy and other routinely measured biochemical parameters.*

**Patients and Methods.** *Eighty-five patients participated in the study. Their mean age was 62 years, and the HD treatment was 33 months. Incidence of VAF over the preceding 18 months was analyzed retrospectively. any dysfunction of VA that required a different surgical intervention. Serum levels of Hcy and severa parameters related to the adequacy of HD, osteodystrophy, nutrition status, and atherosclerosis were deter body mass index, normalized protein catabolic rate, and mean blood pressure were calculated. Additionall Hcy was determined in a healthy control group (n = 12).*

**Results.** *VAF, as venous or graft thrombosis (n = 12) and stenosis of anastomosis (n = 13), was observed in 2 (30%). Mean Hcy level was significantly higher in the HD patients than in the control group (26.8 ± 9.5 vs p <.01). Mean Hcy level was significantly higher in patients with VAF than in the other HD patie 25.1 ± 8.5 μmol/L, p <.005). There were no differences in age, duration of HD, and cause of renal failure, a measured parameters, between these groups of patients.*

**Conclusion.** *Patients with extremely elevated Hcy levels had higher incidences of VAF, and needed surgica frequently.*