



EVALUATING THE RISK OF CARDIOVASCULAR DISEASE IN PERITONEAL DIALYSIS PATIENTS



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INTRODUCTION AND AIMS

Cardiovascular (CV) disease is the main cause of death in peritoneal dialysis (PD) patients (1,2). Coronary flow reserve (CFR) impairment and carotid intima media thickness (IMT) are markers of subclinical coronary atherosclerosis. In this study, we aimed to investigate the long-term prognostic value of CFR and carotid IMT in PD patients.

METHODS

A total of 37 PD patients (14 males, mean age: 42 ± 12 years) were included in this study. Twenty renal transplant recipients (RT) (13 males, mean age: 33 ± 9 years) served as the control group. CFR recordings and carotid IMT were measured at baseline and 3 years later. The development of CV disease and mortality during follow up period of eight years were used as end points.

RESULTS

At baseline, there were no differences regarding to CFR values between the PD (1.79 ± 0.49) and RT (1.85 ± 0.49) groups. The IMT levels of PD (0.66 ± 0.11 mm) and RT (0.66 ± 0.13 mm) groups were also similar at baseline. In the PD group, over a period of 8 years, 14 (38.7%) were transplanted and 10 (27%) switched to hemodialysis. In these years, 9 (24.3%) patients developed CV events, 5 (13.5%) patients were dead, 2 (5.4%) patients developed stable angina pectoris, 2 (5.4%) patients had myocardial infarction. After 8 years of the follow up, the baseline IMT values of the PD patients who developed CV events (0.75 ± 0.10 mm) were significantly higher than the remaining patients (0.63 ± 0.09 mm) (p=0.05). Baseline CFR values were similar in both groups. After 8 years of follow up, the IMT values of all the patients who developed CV events were significantly higher (0.78 ± 0.10 mm) than the patients who were not developed any CV events (0.66 ± 0.09) (p=0.03).

CONCLUSION

The CFR values did not predict CV events and mortality in PD patients. However, the patients with elevated IMT values are at risk of CV events and the risk were significantly higher than the other patients.

REFERENCES

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