The Effect of Aspirin in Prevention of Catheter Thrombosis and Increased internal Jugular Venous Catheter permanence

Abstract

Background and Objective: Chronic renal failure is associated with irreversible loss of renal function. If disease was reached this stage needs dialysis. Central cardiac dialysis patients often work due to the formation of clots in the lumen or in the veins, with the prevalence of this disorder reaching 63%. cause of the formation of a clot in the catheter pathway is not well known, and in limited cases, a specific cause for the formation of a clot in the catheter can be found. Recent studies have also shown that aspirin acts not only as an anti-clot drug but also reduces oxidative stress and inflammation. While many studies suggest that platelet function impairs renal failure, several studies have shown that platelet aggregation increases during dialysis. Due to the relatively high prevalence of catheter failure due to thrombosis and the cost of replacing the catheter in these systems, we decided to study the effect of aspirin on prevention of Jugular vein catheter thrombosis and prolonged shelf-life Catheter.

Methods: This interventional study was performed on 114 patients. 114 patients were randomly divided into two groups of 57. Background information such as age, sex, cause of renal failure, concomitant diseases such as diabetes or hypertension, history of cardiovascular and stroke, peripheral vascular diseases, history of statin use or anti-clot drugs were obtained from patients in order to determine their possible effect on the two groups of intervention and control. Catheter size was 14 in all patients. A group of 57 patients was treated with 80 mg daily aspirin regimen. The control group was also treated with placebo. The number of catheter functioning days as well as demographic characteristics of the patients were obtained through a questionnaire and file information.

Results: The mean age of patients was 66.5 years and the standard deviation was 11.04. The mean age of the intervention group was 68.78 and the standard deviation was 9/80 and the mean age of the control group was 22/64 with a standard deviation of 11/80. Statistical analysis showed a significant relationship between the use of aspirin and the prevention of catheter thrombosis. This is more true in diabetics and male sex.

Conclusion:. Aspirin is recommended in patients with a permanent catheter.

Keywords: Aspirin, Dialysis, Jugular vein catheter.