

Abstract

Non Cuffed Catheter Related Complications and Survival among Iranian ESRD Patients Treated in Hasheminejad Kidney Center; 2010-2011

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Introduction:

Using central venous catheter is a common procedure for hemodialysis. We decided to study the survival time of central venous catheters in hemodialysis patients in Hasheminejad Kidney Center, Tehran, Iran.

Method: In this descriptive- analytical study, data was gathered from files of all over 17 years old patients referring for temporary central venous catheter from Feb. 2010 to July 2011. Places of catheterization, complications, survival time, cause of catheter extraction and demographic data of patients recorded and analyzed.

Results:

140 patients were studied comprising 84 male (60%) and 56 female (40%) with mean age value of 55 ± 16 years (17-87). 119 catheter was inserted in right jugular, 15 in left jugular and the remaining in right femoral veins. 6 cases were removed because of systemic infection, 30 cases due to thrombosis, 76 cases because of using fistulas, 25 cases changed to cuffed catheter and the remainder due to loss of need. Survival rate of temporary catheters was 77.3%, 60%, 49.7%, 44%, 35.3% and 34.4% for 1 to 6 months respectively.

According to ANOVA, the functionality time period of catheter had meaningful relation with its place (P: 0.002) and regarding Post.Hoc and ICD this time period had a statistical significance between Right jugular and Femoral veins. Mean functionality of catheters was 2.31 ± 0.9 for Right jugular, 1.86 ± 0.9 for Left jugular and 1 ± 0.000 for femoral veins.

Conclusions:

Since temporary catheters are usually advised to be used for less than one month, we studied their survival for six consecutive months. Most of infections happened in first month and could be considered as the reason that prolonged use of temporary catheters is more beneficial than their complications.