

12th Nursing and Healthcare Congress

October 03-05, 2016 Vancouver, Canada

Effects of arterial needle placement in arteriovenous fistula on dialysis adequacy of end-stage renal disease patients undergoing maintenance hemodialysis

Oscar R Reyes II

Nephro Synergies Inc., Philippines

The arterial needle placement in arteriovenous fistula (AVF) can either be antegrade (in the direction of blood flow or pointing towards the heart) or retrograde (against the direction of blood flow) while venous needle placement should always be in the same direction as the blood flow. This study determined the effects of arterial needle placement in the arteriovenous fistula on dialysis adequacy of End Stage Renal Disease patients undergoing maintenance hemodialysis in United Candelaria Doctors Hospital - Nephro Synergies Inc. Hemodialysis Center. A randomized controlled trial design was used in the study. A total of 20 non-diabetic, non-cardiac patients on maintenance hemodialysis for more than 6 months were randomized either to the intervention group (patients' AVF were cannulated in a retrograde manner) or the control group (patients' AVF were cannulated in an antegrade manner). Urea reduction ratio (URR) and Kt/V as well as access recirculation percentage were used to determine dialysis adequacy. Pre-dialysis, in the first 30 minutes of dialysis initiation and post-dialysis samples were obtained in each patient in 6 succeeding hemodialysis considering dialyzer reuse up to fifth reuse. The findings of the study revealed that the mean URR and Kt/V of subjects cannulated in retrograde manner and antegrade manner were 69.35% and 1.45, and 74.65% and 1.70, respectively. The mean access recirculation percentage of the subjects was 4.65% in the intervention group and 3.02% in the control group. Antegrade arterial needle placement provides more adequate hemodialysis than retrograde arterial needle placement in terms of URR and Kt/V among non-diabetic, non-cardiac patients undergoing maintenance hemodialysis in 6 succeeding hemodialysis sessions. The directions of the arterial needle either retrograde and antegrade did not have significant effects on access recirculation.

Biography

Oscar R Reyes II has completed his Master of Science in Nursing from Sacred Heart College. He graduated Magna Cum Laude and awarded as Best in Graduate Student Research. He is the Nursing Care Coordinator of United Candelaria Doctors Hospital – Nephro Synergies Inc. Hemodialysis Center.

oscarreyesii@yahoo.com

Notes: