We describe a case of recurrent symptomatic intra-dialytic bradycardia due to abnormal positioning of CVC that resolved after the repositioning of the catheter” Sitaula et al (2019).

Abstract:

Sudden cardiac death (SCD) is reported as leading cause of death in patients on chronic hemodialysis. Arrhythmias are proposed to be a major predisposing factor for SCD. However, triggers for potentially lethal arrhythmias are not well understood. Here we describe a case of 72-year-old man on chronic hemodialysis via permanent Central venous catheter (CVC) who was admitted for evaluation after unwitnessed fall. Within 10 minutes of his first routine dialysis session in the hospital, he had cardiac-arrest. He was successfully resuscitated within 3 minutes. The next day, fifteen minutes into the dialysis session, he had bradycardia with telemetry demonstrating long sinus pause and he lost consciousness. After few minutes of Advanced Cardiac Life Support (ACLS) he regained pulse and consciousness. Further review of the chest X-ray revealed the tip of CVC to be directly touching the distal Superior Vena Cava (SVC) wall. We felt the catheter tip may have migrated after the fall and now is irritating the Sinoatrial node and triggering bradyarrhythmia. Next day, the CVC was exchanged, and the tip was placed higher up in superior vena-cava. After repositioning, we started him on dialysis under intensive monitoring, and he tolerated well without any arrhythmia. Subsequent dialysis was uneventful. We describe a case of recurrent symptomatic intra-dialytic bradycardia due to abnormal positioning of CVC that resolved after the repositioning of the catheter. This case in addition to similar case in nondialysis settlings provides additional insights into mechanisms of fatal arrhythmias in hemodialysis patient having CVC.

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Reference:

issue”: Resolved with catheter repositioning. Hemodialysis International. February 18th.  