Abstract:

The creation and maintenance of vascular access for hemodialysis patients is responsible for a significant amount of morbidity and hospital expenses which continue to escalate with increasing population of ESRD patients. A retrospective review of patient charts were performed from 2008 to May 2011 at an academic tertiary care center who had a diagnosis of vascular access failure based on ICD 9 coding. Data regarding demographic information, length of stay (LOS), source of insurance, hospital expenses, and discharge status were obtained. Based on strict inclusion criteria we identified 172 total patients. The mean age among all patients was 60.53±15.35 years and the majority of patients were Hispanic (n=81). The Mean LOS was 5.30±4.64 days. Mean hospital costs were 41,896±20,318 US$. Patients admitted for tunneled dialysis placement had greater length of stay (p-value=0.011) as did patients with hypertension (p-value=0.030). Hospital expenses were significantly higher for patients admitted for arterio-venous fistula complications (55,456±23,779 US$) compared with admissions for catheter or dialysis graft related complications (p-value=0.004). Patients on Medicare had significantly lower length of stay (3.98±3.32 days) compared with patients with Medicare/Medical (6.59±5.69 days), p-value=0.047. Inpatient management of vascular access failure is associated with
increased length of stay, and significant hospital expenses. Timely referral to vascular access centers can prevent unnecessary hospitalizations and provide cost-saving benefits.