EARLY AND MID-TERM OUTCOMES OF FEMORO–ILIO–CAVAL VEIN STENT IMPLANTATION

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Abstract:
Background: Femoro–ilio–caval (FIC) venous obstruction has increased in prevalence and endovenous recanalization and stent implantation are increasing as well. The aim of this study was to assess the 2-year clinical outcomes in one of the largest series reported of FIC vein stent placement.

Methods: We conducted a single center, retrospective analysis of 185 patients who underwent FIC stent implantation between May 2017 and May 2019, 327 procedures were performed. Diagnosis of compression was made on ilio caval duplex ultrasound and met clinical criteria to further proceed with an invasive study. The primary endpoint was stent thrombosis, patency, cardiovascular death, major adverse cardiac and cerebrovascular events (MACCE), any death, intracranial bleeding, access site complication, and major bleeding in a 24 month follow up.

Results: At 2-year follow up, 80.8% of patients were free of complications. Moderate to severe stent restenosis and stent thrombosis were highest at 1 week follow up (6.1% and 3.5%, respectively). Beyond 1 year, there was freedom from very late stent thrombosis. Moderate to severe stent restenosis rates increased overtime as primary patency decreased. There were no deaths, 2 patients (0.7%) had subdural hematomas and 4 patients (1.4%) had MACCE.

Conclusion: Vein stent implantation for FIC vein obstruction can be performed with great success and low complications. Complications reported were highest during early follow up with majority presenting as early stent thrombosis.