Tackling the Left Renal Vein Thrombus During Laparoscopic Radical Nephrectomy: A Novel Approach

Introduction and Objective: A renal vein thrombus associated with a renal tumor is always a challenge to tackle by a minimally invasive approach. Most papers detailing this problem have shown methods of tackling Right renal vein thrombi. We present our approach to thrombi in the Left renal vein with left sided renal tumors treated with laparoscopic surgery.

Materials and Methods: We present 4 cases operated at 2 different centers by this novel approach. All 4 cases had Left renal tumors with thrombus in the left renal vein but not entering the IVC. Angioembolization was done immediately prior to the surgery. This enabled primary control of the renal vein at IVC level. Approach to the renal vein was done with a right side up position. The left renal vein was clipped / stapled and cut at the IVC after which the patient's position was changed to left side up. The laparoscopic nephrectomy was then completed in the routine manner and kidney delivered.

Results: The surgery could be completed successfully in all the patients without any complications. The margins were clear in all the cases.

Conclusions: This approach with a multidisciplinary approach involving the interventional radiologist seems to be a safe, efficacious and oncologically sound technique for tackling left renal vein thrombi in a minimally accessible fashion.