

MP04-14 Complications of Endovascular Stapling Devices During Minimally Invasive Radical Nephrectomy: An Updated Review of the Food and Drug Administration Database from 2009-2019

Nikhil Gopal MD¹, Bronwyn Long¹, Neel Patel MD², John Phillips MD¹, Majid Eshghi MD¹

1- Department of Urology, New York Medical College/Westchester Medical Center, Valhalla NY

2- Department of Urology, Keck School of Medicine of USC, Los Angeles CA

Take-Home Points

1. Endovascular staplers can result in a small, but appreciable, amount of serious complications, including death.
2. No deaths or reoperations due to failure in staple line occurred with TA™ staplers as compared to GIA™ or Ethicon™ staplers. There were also fewer conversions to open with TA staplers as compared with other staplers.
3. Misfires and jams constituted most of the stapler faults and did not differ in frequency based on stapler type.
4. Every stapler sent to the manufacturer for evaluation, except for one, was faulty due to human error. A third of all evaluated “faulty” staplers were found to have no functional abnormalities.

Practice-Changing Considerations

- Increased use of TA stapler
 - Cutting and stapling in separate steps = assess staple line before cutting
- More robust in-service instruction on stapler use for OR staff
 - Including troubleshooting complications that may arise