INVITED COMMENTARY

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It is unquestionable that endovascular aneurysm repair (EVAR) has created a paradigm shift in our ability to manage patients with ruptured abdominal aortic aneurysms (AAAs). At Albany Medical Center, shortly after we performed our first ruptured EVAR a decade ago in 2002, we realized the potential benefits of the endovascular technology and techniques for patients with ruptured AAAs. We also realized the potential limitations that might preclude its widespread utilization, and since then we have established and published the benefits of a standardized multidisciplinary approach to rupture EVAR that has resulted in lowering the overall mortality and morbidity in patients with these life-threatening emergencies.

Over the past several decades, the overall mortality of open surgical repair (OSR) for a ruptured AAA has been reported by most centers to range between 30% and 70% depending on the local surgeon expertise as well as regionalization of care that generally has a selection bias against acute hemodynamically unstable ruptures that often do not survive to get treatment. Furthermore, over the past decade, a vast majority of >50 publications (single center, multicenter, National Surgical Quality Improvement Program database, and meta-analysis) in peer reviewed journals have reported on the benefits of rupture EVAR. The only studies not indicating rupture EVAR survival advantage are those in which the rupture EVAR mortality ranged from 35% to 50% and matched that of OSR; a clear indication that surgeons and interventionists should stick to what we do best, albeit rupture EVAR or OSR.

I want to congratulate Dr Saqib and colleagues at the University of Pittsburgh Medical Center for reporting on their 10-year experience of ruptured EVAR and OSR. Their experience indicates that, with expertise in both emergent EVAR and OSR, the short-term mortality can be equally reduced in both groups, albeit the morbidity of r-EVAR is significantly lower. It would also appear that all 37 patients (100%) with ruptured EVAR and only 111 of 241 patients (46%) with ruptured OSR were available for follow-up and underwent propensity score-based analysis. Although I applaud the University of Pittsburgh Medical Center vascular surgery group to be technically savvy in performing ruptured OSR and obtain outcomes that are remarkable, I feel obliged to comment on their inability to include the remaining 54% of patients with ruptured OSR has resulted in a cumulative midterm Kaplan-Meier survival analysis that would strongly bias in favor of OSR. It is likely that a significantly higher percentage of patients that might be lost to follow-up and were not included in this analysis had died, many secondary to aneurysm-related complications.