

Editorial

Let Us Learn from Our Complications

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We all strive for success in our practice, but complications are inevitable. Like a bad dream, such an encounter may be remembered for a life time. Nevertheless, the scope for learning from a complication may not be less than a success story. The “Swiss cheese model of accident causation” was introduced by Dante Orlandella and James Reason of the University of Manchester. The model is applicable in risk analysis and risk management. It represents multiple slices of Swiss cheese, side by side with the holes in the cheese representing weaknesses in the individual parts of a system (such as manufacturing industry or health care system). As the holes are not aligned, a light shined at one hole is prevented from emerging out by the next slice of cheese. Defects in multiple slices of cheese are often required for the light to pass through. In a similar fashion, complications occur secondary to multiple factors such as patient-related issues (e.g., disease severity, severe comorbidities, lack of social support), operator factors (fatigue, lack of training, perception errors, judgement errors, lack of personnel), and inadequacies in the system (poor-quality equipment, lack of facilities for postoperative care, lack of anesthesia services, lack of surgical specialists, lack of trained paramedical staff). Complications more often result when these factors complement each other. As such, deficiency in a single component of the system may not always be recognizable at its first occurrence.

Though a formal training in interventional radiology prepares an individual with the necessary experience to start an interventional practice, it does not guarantee a safe practice of the specialty. A continuous quality improvement process aimed at both the individual and institutional

levels is required for early detection of systemic defects and for improving patient safety. A safety reporting system at the institutional level to report misses and near misses in patient care delivery is essential. Such system would allow anonymous reporting of patient safety issues without any fear of repercussions to the whistle blower. Periodic internal audits and mortality conferences play a major role to review and assess the need for root cause analysis. It is also important to compare the complication rates of each interventional radiologic procedure performed at each the institution and by each practicing physician and compare that to the established reports.

Conferences focusing on procedural complications and patient safety issues are important for both trainees and practicing interventional radiologists. Such meetings allow critical discussions on case selection, hardware used, system deficiencies, and alternative approaches to improve patient safety. Open discussions in such forums may throw a new light on the problem or we can see it from a different angle. We may be able to obtain new ideas and alternative ways of achieving a fruitful result to the patients. Everyone need not learn only by one's own mistakes; but from each other's mistakes too. The Indian Society of Vascular Interventional Radiology has been conducting such meetings on yearly basis, and the meeting for this year is scheduled in the middle of December 2017 at Vapi, Gujarat.

In summary, a good intention alone is not adequate for a safe practice of interventional radiology. A 360-degree understanding of the medical problem, expertise to perform the intervention, and system support with adequate facilities and personnel are essential.

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