

Make PCI great again: Come on USA, catch up with the rest of the world

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Key Points

- Same day discharge after PCI lags in the USA
- The radial approach to PCI reduces complications compared to the femoral approach
- USA physicians need to seize the opportunity to not only perform PCI safely, but with economic responsibility

Healthcare costs continue to be a major economic factor in the US. With aging and growth of diabetes mellitus, cardiovascular disease continues to be the number one killer in the United States. Recent studies have shown convincingly that the radial approach reduces complications without sacrificing technical and procedural success [1]. Over the last decade, our laboratory switched from being almost exclusively a femoral lab to become a radial first lab.

In this same past decade, use of the newer antiplatelet agents has resulted in more rapid and complete antiplatelet inhibition making same day PCI safe with a very low incidence of subacute occlusion. Dual antiplatelet therapy with aspirin combined with ticagrelor or prasugrel has made it possible in our hospital to discharge most if not all elective PCI within 3–5 hr of the procedure [2,3]. We have looked at our expenses and have realized cost savings of just under \$300,000 per year in treating patients with PCI as a same day procedure.

This recent study entitled "Variation in practice and concordance with guideline criteria for length of stay after elective percutaneous coronary intervention" by Din et al., describes results of an online survey [4]. Although this is not a prospective trial and has inherent biases, it is eye opening that same day discharge from PCI is practiced as routine by only 14% of US cardiologists doing procedures versus 32% of Canadian cardiologists and 57% of UK cardiologists. The question I have is why are American cardiologists behind the curve? Although we practice in a far more litigious environment, why don't US cardiologists understand that the radial procedure results in less risk, not only to the

patient, but to your own financial wellbeing? We like others feel that the majority of interventional QA issues as well as complaints and lawsuits have to do with vascular complications.

As with other procedures in medicine, the more experienced, the better outcomes, and this survey confirms that those physicians individually doing more procedures, were more likely to perform more outpatient same day PCI. In addition, institutions that perform more procedures are also more likely to perform outpatient PCI.

So with the celebration of 40 years of angioplasty in September, 2017, how can we make PCI great again? One thing is to attend forums discussing the benefit of the radial procedure or work with operators that perform these procedures on a routine basis. With over 25 years of experience performing the radial procedure, and after having written one of the earlier papers showing the benefit of the arm approach versus groin approach for PCI [5,6], we conduct frequent radial training programs to encourage our colleagues to perform this safer approach to modern day PCI. At the St. Luke's Medical Center in Phoenix, we looked at our last 12 month log of patients undergoing coronary intervention. With 901 total PCI cases, 88.33% were discharged the same day. Working to reduce inpatient expenses and by pursuing a radial first philosophy, these procedures can be performed safely in a same day manner.

Let's get caught up with the rest of our colleagues outside of the United States that understand the benefit of this safe approach in order to be a cost effective medical citizen.

CONFLICT OF INTEREST

Nothing to report.

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