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## Spotlight on Special Topics

### EXPEDITED MITRAL VALVE REPAIR USING ONE-STOP TEE DURING THE COVID-19 PANDEMIC

Poster Contributions

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Authors: *Alexis K. Okoh, Amy Suhottliv, Fady Ibrahim, Abdul Hakeem, Ankur Sethi, James Coromilas, Antonio Chiricolo, Leonard Lee, Mark Russo, Chunguang Chen, RWJ Barnabas Health, New Brunswick, NJ, USA*

**Background:** Traditionally, pre-operative planning for percutaneous mitral valve repair (PMVr) with Mitra Clip includes a pre-operative transthoracic (TTE) and transesophageal (TEE) echocardiograms in addition to intraoperative TEE. To streamline pre-operative work-up during the COVID-19 pandemic, we implemented an expedited treatment protocol including eliminating the need for a pre-operative TEE.

**Methods:** Patients who had PMVr at a single center between January and November 2020, were retrospectively reviewed and divided into two groups based on pre and post-expedited treatment protocol eras. Expedited treatment protocol entailed a same-day one-stop TEE, with concomitant PMVr if TEE confirmed MR severity and etiology without unfavorable clip anatomy (diastolic restricted leaflet motion, leaflet calcification or vegetation, large flail gap (>10 mm) or tenting depth >10 mm). Operative outcomes including procedural success, in-hospital complications, and 30-day readmission were investigated.

**Results:** A total of 47 patients had TMVr before (n=18) and after (n=29) the expedited treatment protocol were studied. Of the 29 patients, one stop TTE with concomitant PMVr was successful and uneventful in 96% (n=28). Procedural success was 100% (MR severity: Pre vs. Post: Severe 28 (100%) vs. Trace/Mild: 28 (100%) in all patients. In hospital complications (acute kidney injury, arrhythmias requiring PPM) were comparable in both pre and post protocol eras (p=NS). Rate of readmission between discharge and 30-days was 11% vs 3.4%, p=NS in the pre- and post-eras respectively. At 30-day follow up, there were no reported deaths in both eras.

**Conclusion:** During the COVID-19 pandemic, one-stop TEE with concomitant PMVr with the Mitra Clip was safe and feasible. Clinical outcomes were comparable to that of standard practice before the pandemic.