had RBBB, 25% had LBBB, 3% had IVCD, 12% were RV paced and 24% had narrow QRS complexes. Pacing indications: AV block with LVEF 35%-50%: 48%, rescue CRT or pacing induced cardiomyopathy: 40% and refractory AF with LVEF <50%: 12%. Mean procedural duration was 84 ± 45 mins and mean fluoroscopic time was 14 ± 13 mins. Paced QRSd was 116 ± 14 ms. Mean LV activation time was 74.6 ± 12 ms at high output and 78 ± 13 ms at low output. LBB potentials were noted in 20% patients. Transition from non-selective to selective LBBA or septal pacing was noted in 67%. Mean follow-up was 299 ± 220 days (median 248 days). Lead parameters remained stable during intermediate term follow-up (Fig A). Left ventricular EF improved significantly from 36.5 ± 10% to 45.4 ± 12% during follow-up (Fig B). The were no chronic LBBAP lead related complications such as lead perforation, threshold rise >3V or lead revision.

**Conclusion:** LBBAP is a safe and feasible alternative for CRT. LBBAP is associated with stable intermediate term lead parameters, low complication rate, and is associated with improved echocardiographic outcomes.

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**SEPTAL FLASH CORRECTION WITH HIS-PURKINJE PACING PREDICTS ECHOCARDIOGRAPHIC RESPONSE IN RESYNCHRONIZATION THERAPY**

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**Background:** His-Purkinje conduction system pacing (HPCSP) has been proposed as an alternative to cardiac resynchronization therapy (CRT); however, no predictors of echocardiographic response have been described. Septal flash (SF) is a marker of intraventricular dyssynchrony.

**Objective:** The study aimed to analyze whether HPCSP corrects SF in patients with CRT indication, and if correction of SF predicts echocardiographic response.

**Methods:** Prospective observational study (n=30). Left ventricular ejection fraction (LVEF) was measured with echocardiography at baseline and at 6-month follow-up. Echocardiographic response was defined as increase in 5 points LVEF. ECG Imaging was performed (CardioInsight Mapping Vest-Medtronic) in 2 patients to validate ventricular activation shortening and to study the basal and HPCSP activation pattern.

**Results:** HPCSP shortened QRS duration by 48 ± 21 ms and SF was significantly decreased (baseline 3.6 ± 2.2 mm vs HPCSP 1.5 ± 1.5 mm p < 0.0001). At 6-months, mean LVEF improvement was 8.6% ± 8.7% and 64% of patients were responders. There was a significant correlation between SF correction and increased LVEF (r = 0.61, p = 0.004). A correction of ≥1.5 mm had 81% sensitivity and 80% specificity to predict echocardiographic response (area under curve 0.86, p = 0.019).

**Conclusion:** HPCSP improves intraventricular dyssynchrony and results in 64% echocardiographic responders at 6-month follow-up. Dysynchrony improvement with SF correction may predict echocardiographic response at 6-month follow-up (Fig. 1.).