(LVA), defined as bipolar voltage amplitude < 0.5mV (expressed as a percentage of total atrial surface area), and the slowest conduction velocity (CV) were measured in the RA and left atrium (LA), both regionally and globally. Men and women had similar age (64±10 vs. 64±10 yrs), CHADS2 score (1.0(0-1.0) vs. 0(0-1.0)), AF duration (3.0(2.0-7.0) vs. 3.0(1.0-6.0) yrs) and persistent AF (27% vs. 29%). Compared to men, women presented with worse quality of life scores (CCS-SAF≥3: 100% vs. 53%, p=0.001). Structurally, LA size was similar between men and women (40±12 vs. 44±17ml/m2, p=0.42) as was RA size (20±4 vs. 18±4cm2, p=0.055). In the LA, women had greater global LVA than men (10.3(6.5-27.1) vs. 1.9(1.0-6.2)%, p< 0.001), with the greatest differences in the anterior wall, septum and PV antra. Likewise, women exhibited slower global LA CV than men (0.63±0.14 vs. 0.82±0.22m/s, p=0.002), with the greatest differences in the anterior wall, septum and PV antra. In the RA, women had more global LVA than men (11.9(10.0-14.6) vs. 3.4(2.6-5.3)%, p< 0.001), with the greatest differences in the inferior RA. Women and men had similar global RA CV (0.67±0.28 vs. 0.64±0.10m/s).

CONCLUSION: Despite similar age, AF duration/burden and bi-atrial size, women undergoing PVI have greater bi-atrial structural remodelling than men. The latter is characterized by 3- to 5-fold greater global bi-atrial LVA and slower LA CVs in women, which primarily affect the LA anterior wall, septum and PV antra, as well as the inferior RA. These sex differences may explain the higher risk of AF recurrence after PVI reported in women.

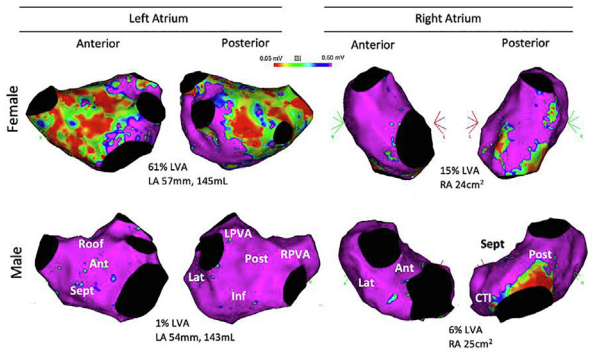

Figure. Comparison of bi-atrial Low Voltage Area (LVA) between age-matched male and female with AF
The female patient has greater bi-atrial LVA compared to the age-matched male. LA size is comparable between male and female, as is RA size. Sept=septum; Ant=anterior; LPVA=left pulmonary vein antrum; RPVA=right pulmonary vein antrum; Post=posterior; Inf=inferior; Lat=lateral, CTI=cavotricuspid isthmus

Heart and Stroke Foundation of Canada

P084
SIMPLIFIED EKG ONLY METHOD TO ACHIEVE PHYSIOLOGIC PACING

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BACKGROUND: His pacing (His-P) and left bundle branch pacing (LBB-P) are new modalities to obtain a more physiologic pacing (PP); they require however, new tools and new skills. We describe a simplified method to achieve LBB-P, using only a 12-lead EKG to guide lead deployment; mid septum (not too anterior close to His area or LV summit and not too posterior is sought).

METHODS AND RESULTS: From our cohort of 211 physiologic pacing attempts (2019-2022), we extracted all patients (pts) with detailed available 12 lead EKG during implant. His-P and LOT/HOT-CRT pts were excluded. We reviewed the presence of two features: inferior lead discordance (at least one lead from II, III or aVF with different polarity compared to the others) or isodiphasic QRS at the beginning of 3830 Medtronic lead screwing, and the presence of typical LBB capture morphology after final position. Leads were screwed until LBB-P morphology was obtained or bipolar and unipolar pacing produced the same QRS pacing morphology. A total of 161 pts tracings were analyzed. Pts were 56% males; median age was 79 +/- 8.5 years. Indications were: SSS 25%, AV block 41% (including 8 post TAVR), Pacemaker induced cardiomyopathy (PIMC) 27% and AV node ablation in 7%. Success (defined as a QRS shorter than 140ms and a LVAT shorter than 90ms, or 20% reduction in QRS width) was achieved in 93.2% of pts. Procedural time (pts in-out) was 88min (+/- 37min). Perforation was confirmed when aVL has the same polarity of aVR and there was a monophasic R wave in V1 (mostly when anterior orientation or apical sites were tempted). Basal versus apical positions were easily differentiated looking at normal progression of R waves in precordial leads.

CONCLUSION: Localizing the middle of the septum is easy, before start screwing, just looking at polarity of inferior leads, better outcomes are obtained starting at the middle of the septum (more LBB-P morphology achieved with acceptable failure rates). The anterior region seldom obtains a LBB-P morphology, but it is the second place to try as QRS are almost always the thinnest obtained.

	Failure (%)	LBB capture morphology (%)	QRS (ms) post implant	LVAT (ms) +/- STD	Threshold at implant (V@0,4-0,5ms) +/- STD	Impedance at implant (ohms) +/- STD
Anterior oriented (+ II, III, avF)	2	15	120 +/- 14	73 +/- 14	0,8 +/- 0,4	799 +/- 188
Mid septal oriented (isodiphasic or divergent II, III or aVF)	7	75	125 +/-18	75 +/- 15	0,98 +/- 0,48	699 +/-166
Posterior oriented (- II, III or aVF)	15	81	131 +/- 19	76 +/- 17	1,13 +/-0,49	782 +/- 188

P086
STROKE RISK AND ORAL ANTICOAGULATION USE WITH EXTENDED CARDIAC MONITORING FOR ATRIAL FIBRILLATION VERSUS USUAL CARE: A SYSTEMATIC REVIEW AND META-ANALYSIS

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BACKGROUND: Extended cardiac monitoring is used to detect atrial fibrillation (AF) in high-risk populations, including