

the absolute increase in survival to discharge for females was 2.2% (95% CI 0.1%-3.6%). Female sex was not associated with survival to 30 days post-OHCA (OR 1.02, 95% CI 0.92-1.14; I<sup>2</sup>=79%) (Table 1).

**CONCLUSION:** In adult patients experiencing OHCA, with high certainty in the evidence from studies with low risk of bias, female sex was a small and not clinically important prognostic factor for survival to discharge. Differences in survival between men and women are likely to be related to the severity and type of disease leading to the OHCA, the response in the field, and the type of treatment in hospital. Future models that aim to stratify risk of survival post-OHCA should focus on sex-specific factors as opposed to sex as an isolated prognostic factor.

SURVIVAL TO DISCHARGE POST OUT OF HOSPITAL CARDIAC ARREST			
Study Results and Measurements	Absolute Effect Estimates		Quality of Evidence and Summary
	Baseline	With Predictor	
OR 1.20 (CI 95% 1.18-1.23) Based on data from 310,858 patients in 7 studies	130 per 1000	152 per 1000	High
	Difference: 22 more per 1000 (CI 95% 1 more – 36 more)		Female sex does not have an important effect on survival to discharge.
SURVIVAL TO 30 DAYS POST OUT OF HOSPITAL CARDIAC ARREST			
Study Results and Measurements	Absolute Effect Estimates		Quality of Evidence and Summary
	Baseline	With Predictor	
OR 1.02 (CI 95% 0.92-1.14) Based on data from 497,440 patients in 7 studies	169 per 1000	172 per 1000	Low due to serious risk of bias and serious inconsistency.
	Difference: 3 more per 1000 (CI 95% 9 fewer – 21 more)		Female sex probably has little to no important effect on survival to 30 days.

**Table 1.** Summary of relative and absolute effect estimate for outcomes. Baseline risk was calculated by meta-analyzing the reported absolute risk of all included studies using the random effects method. The pooled OR for female sex was applied on the baseline risk to determine the absolute effect. An *a priori* threshold of 5% (50 per 1000) was set for an important effect. Overall certainty in effect estimates was assessed using the GRADE evaluation system. CI, confidence interval, OR, odds ratio

## P076 OBJECTIVE CARDIOVASCULAR AUTONOMIC ABNORMALITIES IN POST-ACUTE SEQUELAE OF COVID-19 (PASC): OVERALL AND SEX-BASED PREVALENCE

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**BACKGROUND:** The novel coronavirus has negatively impacted the health and economy of Canada and the world. While most patients recover, many patients are left with residual symptoms even several months after resolution of the acute illness (“Post-Acute Sequelae of COVID-19” [PASC]; or “Long COVID”). Symptoms can include fatigue, light-headedness, and achycardia/palpitations, which are common in cardiovascular autonomic disorders such as Postural Orthostatic Tachycardia Syndrome (POTS), Initial Orthostatic Hypotension (IOH), Orthostatic Hypotension (OH), and Inappropriate Sinus Tachycardia (IST). Currently, we do not know the prevalence of objective autonomic abnormalities in patients with PASC, nor if there are sex differences. We aimed to determine the prevalence of objective autonomic abnormalities, and whether there was a sex-difference, among patients with PASC.

**METHODS AND RESULTS:** Patients with PASC (n=61; F=49; Age=45±11 years) underwent autonomic function testing with beat-to-beat hemodynamics for 10 min supine followed by a 10 min active stand 397±131 days after their COVID infection. Patients were evaluated for hemodynamic criterion for POTS ( $\Delta$ HR $\geq$ 30 bpm within 10 min), IOH (transient  $\Delta$ SBP $\geq$ 40mmHg within 45s), OH ( $\Delta$ SBP $\geq$ 20mmHg within 3 min), and IST (supine HR>100 bpm). Categorical data were analyzed with a Fisher’s Exact test. The POTS criterion was met in 18 (30%) patients with PASC, while the IOH criterion was met in 40 (66%) patients. The IST and OH criteria were each seen in 1 patient. Overall, 44 (72%) patients met the criterion for at least 1 of these disorders. When analyzed by sex, the POTS criterion was met in 18 (37%) females, but no males (P=0.01). IOH criterion was met in females (69%) and males (50%; P=0.2) at a similar frequency. The single OH and IST patients were female. Overall, there was a non-significant trend for more females (78%) than males (50%; P=0.06) meeting the criterion for at least 1 of these disorders.

**CONCLUSION:** Many patients with PASC have objective evidence of autonomic cardiovascular abnormalities. The most common abnormality is IOH, followed by POTS. IOH will be missed unless an active standing protocol is used. POTS was much more common in females than males, but IOH was evenly split between sexes. Overall, there is a trend toward increased frequency of autonomic cardiovascular disorders in females than males. On behalf of the Canadian Long Covid Autonomic Network (CaLoCAN).

Canadian Institutes of Health Research (CIHR)

## P077 PATIENT PERCEPTIONS AFTER EMERGENCY DEPARTMENT VISITS FOR ATRIAL FIBRILLATION: UNNECESSARY FEAR?

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**BACKGROUND:** Guidelines suggest rate or rhythm control are both appropriate for acute management of atrial fibrillation (AF) in the emergency department (ED). However, patient perceptions after ED visit are not well documented or understood.

**METHODS AND RESULTS:** Consecutive consenting patients who presented to a participating ED with the primary diagnosis of recent onset AF, and discharged from the ED, were enrolled in the ED and subsequently interviewed by telephone using a structured questionnaire, within 4 weeks of the visit. All management was at the discretion of the treating physician. Quantitative responses were recorded and analyzed using descriptive statistics. Patients (n= 356) were enrolled across 8 centers from 4 provinces, with 25% non-academic centers. Mean age was 67.3, +/- 13, with 45.0% female patients. In total, 52.8% were treated with cardioversion, with 35.7% initially receiving electrical

cardioversion and 28.7% chemical cardioversion. 40.6% of patients who underwent chemical cardioversion subsequently required electrical cardioversion (Table 1). 84.8% of patients felt they had some knowledge of atrial fibrillation. 23.0% of patients presented to the ED because of reasons relating to fear and anxiety. 43.3% of patients believed they would have suffered stroke, myocardial infarction and/or death had they not presented to the ED. 89.6% of patients with this belief had been to the ED for AF in the past. Those who were treated with cardioversion were significantly more satisfied when asked “how satisfied were you with the care you received in the ED” than those who did not receive this intervention (8.31/10 compared to 5.71/10,  $p < 0.001$ ).

**CONCLUSION:** Almost half of the patients presenting to the ED with AF, when questioned up to 4 weeks later, have fear of a life-threatening consequence of this arrhythmia, and have more subjective satisfaction with treatment if they receive electrical or chemical cardioversion compared to those not cardioverted. These findings suggest a need for better patient education on the goals of AF management.

Table 1: Baseline characteristics stratified by intervention received in the emergency department

	Total (N=356)	Any CV (N=188, 52.8%)	Electrical CV (N=127, 35.7%)	Only chemical CV (N=61, 17.1%)	No CV (N=168, 47.2%)
Mean age (+/- SD)	67.3 (13)	65.5 (13)	62.8 (13)	71.1 (10)	69.4 (13)
Female (%)	160 (45%)	75 (40%)	42 (33%)	33 (54%)	85 (51%)
CHF	34 (9.6%)	18 (9.6%)	7 (5.5%)	11 (18.0%)	16 (9.5%)
HTN	164 (46.1%)	80 (42.6%)	54 (42.5%)	26 (42.6%)	84 (50.5%)
DM	38 (10.7%)	22 (11.7%)	3 (2.4%)	9 (14.8%)	16 (9.5%)
Stroke/TIA	35 (9.8%)	14 (7.4%)	1 (0.8%)	9 (14.8%)	21 (12.5%)
MI/PAD	37 (10.4%)	24 (12.8%)	13 (10.2%)	11 (18.0%)	13 (7.7%)
Prior AF ED Visits: 0	30 (8.4%)	11 (5.9%)	10 (7.9%)	1 (1.6%)	19 (11.3%)
1	75 (21.1%)	31 (16.5%)	18 (14.2%)	13 (21.3%)	44 (26.2%)
>1	239 (67.1%)	145 (77.1%)	98 (77.2%)	47 (77.0%)	94 (56.0%)

\*CV = cardioversion, CHF = congestive heart failure, HTN = hypertension, DM = diabetes mellitus, TIA = transient ischemic attack, MI = myocardial infarction, PAD = peripheral arterial disease. All specified comorbidities were present prior to the index visit.

**P078  
PREVALENCE OF UNREPORTED ATRIAL FIBRILLATION IN ELECTROCARDIOGRAMS WITH VENTRICULAR-PACED RHYTHM: A MULTICENTER EXPERIENCE**

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**BACKGROUND:** Atrial fibrillation (AF) is the most common sustained cardiac arrhythmia and a major preventable cause of stroke. The diagnosis of AF on electrocardiogram is through the recognition of absent p waves and an irregularly irregular ventricular rhythm. However, in ventricular-paced patients, the rhythm on electrocardiogram (ECG) is often regular and may obscure AF diagnosis. Thus, unrecognized AF on ECG poses a potential risk among untreated ventricular-paced patients. There is scant published data reporting the prevalence of underrecognized and untreated ECG-detected AF among ventricular-paced patients.

**METHODS AND RESULTS:** In the first part of this study, we aim (1) to determine the prevalence of AF and unreported AF on ECGs with ventricular-paced rhythm obtained across all hospitals in Winnipeg, Manitoba, Canada. Using data obtained from (1), we then aim (2) to report the rates of untreated and unreported ECG-detected AF among ventricular-paced patients with an indication for anticoagulation, (3) to describe the length of delay in AF recognition and treatment among patients who should be considered for anticoagulation at the time of ECG-detected AF and (4) to identify possible strategies that can improve reporting of AF on ECGs with ventricular-paced rhythm using our institutional software (MUSE Editor ©). This is a retrospective multicenter review of ventricular-paced ECGs. ECGs will be reviewed and confirmed by two independent cardiologists who are blinded from the MUSE interpretation of the ECGs. Of the sample of 1500 ECGs with ventricular-paced rhythm from 2017-2019, 2 independent cardiologists agreed that AF was present in 622 ECGs (41.5%). Of these, 251 (40.4%) were not reported by the interpreting physician to have AF.

**CONCLUSION:** Our study shows that there is a high prevalence of unreported AF on ECG in patients with ventricular-paced rhythm in our local facilities. Further studies are warranted on describing whether this impacts treatment and outcomes among ventricular-paced patients. This study also highlights the importance of identifying possible strategies to improve reporting of AF on ECGs with ventricular-paced rhythm.

**P079  
QUANTITATIVE COMPARISON OF ELECTROCARDIOGRAM FROM SKIIN FULLY TEXTILE CHEST BAND AGAINST STANDARD GEL ELECTRODES**

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**BACKGROUND:** The Skiin Underwear system is a wearable medical device in the form of undergarments that comes with a magnetically attached recording module. The system captures 3 channels of ECG besides temperature and activity and transmits them via Bluetooth Low Energy (BLE) to Skiin companion software, and from there to backend and a web portal.

**METHODS AND RESULTS:** Ten adult participants (5 men and 5 women) worn appropriate-size Skiin chestband (M-XL for men and 2XS-S for women) at subpectoral level, and gel electrodes were placed at closest locations beneath the chest band electrodes (Figure 1). Skiin under the chest band was moisturized without any residue of the moisturizer (Lubriderm). A reference ECG recording system (NorthEast DR200) was used for simultaneous ECG recording of the same ECG leads. The study was performed under the study approved by the University of Toronto Research