



Congenital Heart Disease

WORSE OUTCOMES IN HOSPITALIZATIONS OF WOMEN WITH TURNER SYNDROME COMPARED TO WOMEN WITHOUT TURNER SYNDROME

Poster Contributions
Poster Hall, Hall C
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Session Title: Adult Patients With Congenital Heart Disease: How Do They Compare?
Abstract Category: 9. Congenital Heart Disease: Adult
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Background: While studies show Turner Syndrome (TS) patients are at an increased risk for cardiovascular (CV) complications, outcomes of hospitalized TS patients are yet to be explored.

Methods: Cases of TS and comparable controls were acquired from an administrative database of inpatient hospitalizations. TS cases were matched 1:4 to controls based on primary ICD-9 diagnosis code. The study population was comprised of 14,890 women (n=2978 TS; n=11,912 non-TS) aged 20-80 years hospitalized from 2006-2012 in 8 states. Patients hospitalized for a CV indication (cardiomyopathy, heart failure, arrhythmia, hypertension, atherosclerosis, or ischemic heart disorders) included 2,110 women (n=424 TS; n=1,686 non-TS). Conditional logistic regression models were used to investigate association between TS and mortality, discharge disposition, and length of stay in hospitalized patients after adjusting for age, race, insurance group, and Charlson Comorbidity Index (CCI).

Results: Overall, the odds of mortality were 44% higher in TS patients compared to matched controls (Odds Ratio (OR): 1.44, 95% Confidence Interval (CI): 1.02 – 2.02, p = 0.04). The odds of being discharged to home were reduced by 32% in TS patients compared to matched controls (OR = 0.68, 95% CI: 0.60 - 0.78, p < 0.0001). Likelihood of mortality was significantly higher in patients with TS and a CV primary diagnosis compared to matched controls with a CV primary diagnosis (OR = 3.10, 95% CI: 1.27 – 7.57, p = 0.01). TS patients were also more likely to have a longer than average length of stay (> 4 days) than controls (OR = 1.42, 95% CI: 1.03 – 1.95, p = .03). In those hospitalized with a CV disorder, the odds of being discharged home were lower in patients with TS compared to matched controls (OR = 0.55; 95% CI: 0.38 – 0.80, p = .001).

Conclusions: TS patients have worse outcomes than non-TS patients hospitalized with the same condition. These discrepancies are larger in patients hospitalized for CV diagnoses.