

SEX DIFFERENCES IN OUTCOMES OF CARDIOGENIC SHOCK REQUIRING TEMPORARY PERCUTANEOUS MECHANICAL CIRCULATORY SUPPORT

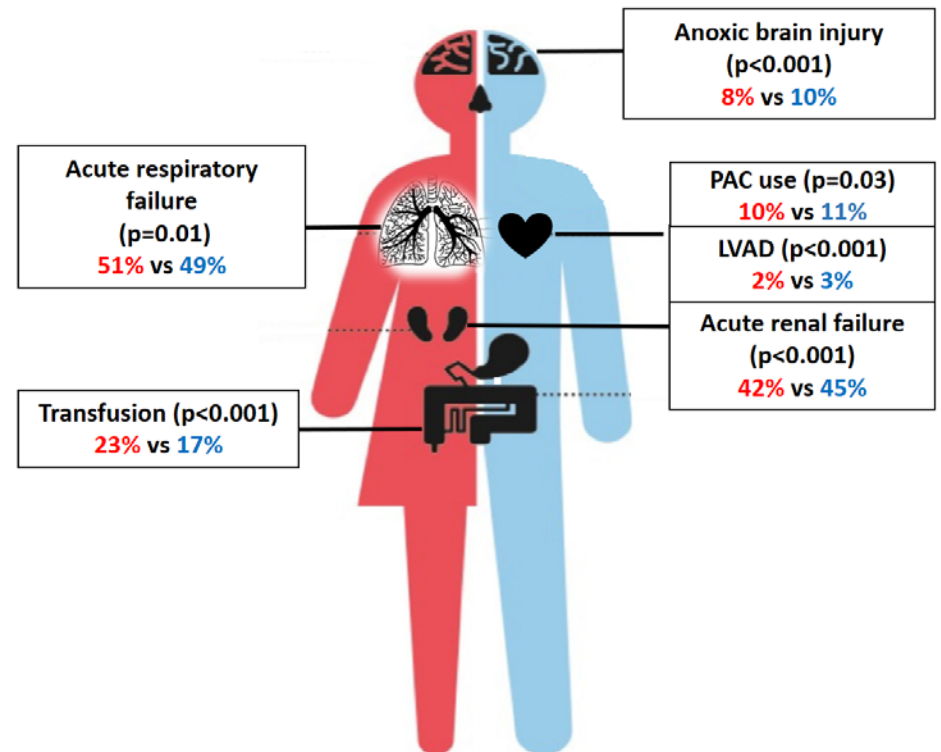
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METHODS

- The National Inpatient Sample (NIS) was used, years 2005 to 2014.
- Patients admitted with CGS, acute myocardial infarction (AMI) and acute decompensated heart failure (ADHF) were identified by ICD-9-CM codes.
- Continuous variables were presented as mean and SD, were compared using Student's t-test. Categorical variables were compared using the Pearson's chi-squared test.
- For the adjusted analysis, a multivariable hierarchical logistic regression analysis was performed, incorporating age, race, admission year, primary payer status, socioeconomic stratum, hospital characteristics, comorbidities, and cardiac procedures.
- Clinical variables included demographics, comorbidities, hospital course, length of stay and procedures as well as time from admission to device insertion. The Charlson Comorbidity Index (CCI) was calculated.
- Statistical analyses were performed using Stata/IC -14.2.

| | OR | S.E. | [95% CI] |
|-------------------|------|-------|-----------|
| Female | 1.18 | 0.03 | 1.11-1.27 |
| pMCS Day | 1.00 | 0.003 | 1.00-1.01 |
| IABP | 1.06 | 0.104 | 0.88-1.29 |
| PVAD | 2.19 | 0.19 | 1.85-2.60 |
| ECMO | 3.89 | 0.37 | 3.22-4.70 |
| Age | 1.03 | 0.001 | 1.02-1.03 |
| INSURANCE | | | |
| Medicaid | 0.94 | 0.06 | 0.83-1.07 |
| Private insurance | 0.77 | 0.03 | 0.72-0.85 |
| Self-pay | 1.32 | 0.09 | 1.15-1.52 |



| | Women | Men | p-value |
|------------------------------------------------------|--------------------------------|--------------------------------|----------------|
| In-hospital mortality; n (%) | 12201 (34) | 22425 (29) | <0.001 |
| Median length of stay, days; n (range) | 8 (3 - 15) | 8 (4 - 15) | 0.126 |
| Median hospitalization costs, US\$; n (range) | 42774.96 (26020.41 - 73788.80) | 44405.04 (26958.08 - 75639.94) | <0.001 |

DISCUSSION

- Among patients who require pMCS, women experience 15% higher in-hospital mortality, similar length of stay. Women had higher comorbidity load, reflected by a higher Charlson comorbidity index.
- Acute renal failure and anoxic brain injury were more common in men; however, they were more likely to receive a left ventricular assist device.
- Future studies addressing early sex-specific interventions in heart failure and ischemic heart disease are needed to reduce these differences.
- NIS is limited to inpatient admissions, and thus, this is a special population that may differ in many ways to the noninstitutionalized older adult US population.