

ABSTRACT NO. 36

**THE JULY EFFECT AND CARDIAC SURGERY: EFFECT OF THE BEGINNING OF THE ACADEMIC CYCLE ON OUTCOMES**

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**BACKGROUND:** Recent studies have shown that general surgical procedures performed at academic centers produce the worst outcomes during the month of July. However, we theorized that cardiac surgery is less vulnerable to the potentially disruptive effect of the beginning of the academic cycle.

**METHODS:** Prospectively collected data from our database were used to identify 1673 cardiac surgical procedures performed between October 1997 and April 2007. The morbidity and mortality rates were compared between 2 periods of the academic year, one early (July 1st to August 31st, n=242) and one later in the year (September 1st to June 30th, n=1431). After patient baseline characteristics were compared between the 2 periods, a prediction model was constructed by using stepwise logistic regression modeling with a significance level of 0.05 for both entry and selection.

**RESULTS:** Baseline patient characteristics and risk profiles were mostly similar between the 2 periods. Operative morbidity rates did not differ significantly between the early (12.8%) and later periods (15.4%) (odds ratio [OR], 0.83; 95% confidence interval [CI], 0.54-1.28; P=0.41). Additionally there was no significant difference in operative mortality between the early (1.2%) and later periods (3.5%) (OR, 0.28; 95% CI, 0.07-1.19; P=0.09).

**CONCLUSION:** The early part of the academic year had no adverse impact on outcomes. In fact, it was associated with lower morbidity and mortality, although this difference was not statistically significant. Further studies are needed to determine whether our findings are applicable to other academic cardiac centers.