A RISK SCORE TO PREDICT MAJOR ADVERSE EVENTS AND 30-DAY ALL-CAUSE MORTALITY IN PATIENTS UNDERGOING TRANSVENOUS LEAD EXTRACTION.

Poster Contributions
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Background: Although risk factors for major adverse events (MAE) and 30-day all-cause mortality in patients undergoing transvenous lead extraction (TLE) are known, the cumulative risk rendered by their combination has not been determined. Our objective was to create a preoperative risk score for determining TLE outcomes.

Methods: 3000 TLE procedures were performed and 5533 leads were extracted at the Cleveland Clinic between August 1996 and August 2011. Integer risk scores for MAE and 30-day all-cause mortality were developed from a multivariable regression model using baseline clinical and procedural characteristics.

Results: MAE occurred in 45 (1.5%) patients and had 4 independent baseline predictors (age, platelet count, combined age of leads, and end-stage renal disease [ESRD]) (model c-statistic = 0.636). 30-day all-cause mortality occurred in 61 (2.0%) patients and had 8 independent baseline predictors (age, body mass index [BMI], platelet count, international normalized ratio [INR], ESRD, New York Heart Association [NYHA] functional class, valvular heart disease, and indication for lead extraction) (model c-statistic = 0.832). The figure includes integer risk score nomograms (A, C) and calibration plots (B, D) for MAE and 30-day all-cause mortality, respectively.

Conclusions: Risk of MAE & 30-day all-cause mortality in particular can be assessed with good discriminative power using readily available clinical information. Further prospective validation of the models is anticipated.