编号：YY004-20190930001

标题：Comparison of Stroke Risk Stratification Scores for Atrial Fibrillation

简介：Several stroke risk stratification scores have been developed to guide clinical decision-making in patients with nonvalvular atrial fibrillation (AF). The aim of this study was to compare the performance of the CHADS2, CHA2DS2-VASc and R2CHADS2 risk scores to predict stroke. This retrospective cohort study was based on electronic medical records from Clalit Health Services (CHS), the largest payer provider healthcare organization in Israel. Data of CHS members with AF diagnosis between 2004 and 2015 were extracted. Demographic and co-morbidity data were used to calculate the 3 risk scores, and the performance of the scores to predict stroke were compared using area under the curve and net reclassification index. Of the 89,213 CHS members with AF, 52.3% were women and median age was 76 years. The proportions of patients at high risk were 66.2%, 86.7%, and 71.1% in the CHADS2, CHA2DS2-VASc, and R2CHADS2, respectively, with stroke incidence rates of 2.91, 2.35, and 2.80 per 100 person-years, respectively. Area under the curves for stroke prediction were 0.61 for both CHADS2 and CHA2DS2-VASc and 0.59 for R2CHADS2. Net reclassification index analysis demonstrated a net improvement of 0.089 in the index when CHA2DS2-VASc was compared with CHADS2 and a net reduction of 0.083 when R2CHADS2 was compared with CHADS2. In conclusion, current stroke stratification scores have comparable but limited ability to predict stroke in patients with AF. Stroke prevention strategies may vary depending on the applied stratification. There is a need for a better stroke risk stratification score for patients with AF.

全文链接：http://pan.ckcest.cn/rcservice//doc?doc_id=43725

编号：YY004-20190930002

标题：Relation of Acute Decompensated Heart Failure to Silent Cerebral Infarcts in Patients With Reduced Left Ventricular Ejection Fraction

简介：Heart failure (HF) is a prothrombotic state with increased rate of thromboembolic events. Magnetic resonance imaging studies demonstrated increased rate of silent cerebral infarcts (SCI) in this patient group and SCIs were shown lead to dementia, cognitive decline, and depression. We aimed to show acute decompensated phase is associated with increased rate of recent SCI in reduced ejection fraction HF patients. HF patients with sinus rhythm hospitalized for acute decompensation were studied. Neuron specific enolase (NSE), a sensitive neuronal ischemia marker, was used to detect recent SCI. Decompensated and compensated phase blood samples for NSE were collected on the day of admission and on the third day of compensation, respectively. One hundred and forty seven patients with mean age of 72 were studied. There were significantly more patients with positive NSE levels at decompensated state (29% vs 4%, p <0.001). Multivariate predictors for recent SCI were smoking, new onset atrial fibrillation, spontaneous echo contrast of left ventricle, and aneurysmatic apex. Statin use was found to be protective against NSE elevation. In conclusion, our data reveal that decompensated HF is significantly associated with increased levels of NSE suggestive for silent neuronal injury.

全文链接：http://pan.ckcest.cn/rcservice//doc?doc_id=43727

编号：**YY004-20190930003**

标题：**One- to 10-Day Versus 11- to 30-Day All-Cause Readmission and Mortality in Older Patients With Heart Failure**

简介：Heart failure (HF) is the leading cause for 30-day all-cause readmission in older Medicare beneficiaries and 30-day all-cause readmission is associated with a higher risk of mortality. In the current analysis, we examined if that association varied by timing of 30-day all-cause readmission. Of the 8,049 Medicare beneficiaries hospitalized for HF, 1,688 had 30-day all-cause readmissions, of whom 1,519 were alive at 30 days. Of these, 626 (41%) had early (first 10 days) 30-day readmission. Propensity scores for early 30-day readmission, estimated for all 1,519 patients, were used to assemble a matched cohort of 596 pairs of patients with early versus late (11 to 30 days) all-cause readmission balanced on 34 baseline characteristics. Two-year all-cause mortality occurred in 51% and 57% of matched patients with early versus late 30-day all-cause readmissions, respectively (hazard ratio [HR] associated with late 30-day readmission, 1.22; 95% confidence interval [CI], 1.04 to 1.42; $p = 0.014$). This association was not observed in the subset of 436 patients whose 30-day all-cause readmission was due to HF (HR, 1.01; 95% CI, 0.79 to 1.28; $p = 0.963$), but was observed in the subset of 756 patients whose 30-day all-cause readmission was not due to HF (HR, 1.37; 95% CI, 1.12 to 1.67; $p = 0.002$; p for interaction, 0.057). In conclusion, in a high-risk subset of older hospitalized HF patients readmitted within 30 days, readmission during 11 to 30 (vs 1 to 10) days was associated with a higher risk of death and this association appeared to be more pronounced in those readmitted for non–HF-related reasons.

全文链接：http://pan.ckcest.cn/rcservice//doc?doc_id=43728

编号：**YY004-20190930004**

标题：**Outcomes of Acute Conduction Abnormalities Following Transcatheter Aortic Valve Implantation With a Balloon Expandable Valve and Predictors of Delayed Conduction System Abnormalities in Follow-up**

简介：Transcatheter aortic valve implantation (TAVI) is an acceptable treatment for severe aortic stenosis in high or intermediate risk patients. Conduction abnormalities are a known complication of TAVI. Most abnormalities occur perioperatively but can develop later. The predictors of delayed conduction abnormalities are unknown. Patients who underwent TAVI at our institution were reviewed. Patients with a pre-existing pacemaker were excluded. Baseline, in-hospital, and 30-day follow-up ECGs were reviewed. Patient and procedural characteristics were analyzed to look for predictors of acute and delayed abnormalities. Ninety-eight patients were included. All valves implanted were balloon expandable, most commonly SAPIEN S3 (78%). Thirty-seven (37.7%) patients developed abnormalities before discharge. Of these patients, 20 (57.1%) had complete resolution at 30-day follow-up. No patients with new conduction abnormalities during hospitalization had additional abnormalities at 30-day follow-up. Five (5.1%) patients developed new conduction abnormalities following discharge. Overall, 22 (22.4%) patients had conduction abnormalities at 30-day follow-up which were not present at baseline. Predilatation ($p = 0.003$), higher ratios of balloon ($p = 0.03$) or valve ($p = 0.05$) size to left ventricular outflow tract, and previous myocardial infarction ($p = 0.034$) were predictive of acute conduction abnormalities. Baseline right bundle branch block ($p = 0.002$), longer baseline ($p < 0.001$) and discharge ($p = 0.004$)

QRS duration, moderate, or severe aortic insufficiency (p = 0.002) and atrial fibrillation (p = 0.031) were predictors of new conduction abnormalities after discharge. In conclusion, most new in-hospital conduction abnormalities resolve by 30-day follow-up. In-hospital conduction abnormalities are related to technical aspects of TAVI while delayed conduction abnormalities are related to baseline conduction system disease.

全文链接：http://pan.ckcest.cn/rcservice//doc?doc_id=43729

编号：YY004-20190930005

标题：Comparison of Outcomes of Transcatheter Versus Surgical Aortic Valve Replacement in Patients ≥80 Years of Age

简介：Transcatheter aortic valve implantation (TAVI) procedures have increased exponentially since FDA approval in 2011. Older patients who underwent aortic valve replacement, either TAVI or surgical aortic valve replacement (SAVR), have elevated risk. Using the National Readmission Database, we included patients ≥80 years who underwent either TAVI or SAVR from 2011 to 2015. In-hospital outcomes of TAVI versus SAVR were compared using propensity-matched analysis to reduce the confounding effect of between-group imbalances. We identified a total of 30,590 TAVI and 54,204 SAVR procedures performed during the study period. The propensity score-matching algorithm yielded 19,713 patients in each group. The in-hospital mortality rates were significantly lower in TAVI compared with SAVR (3.4% vs 6.8%, p <0.001). Similarly, the 30-day readmission rate (15.2% vs 18.1% p = 0.001), in-hospital complications, mean length of stay (7 vs 12 days, p <0.001), and hospital cost (US$ 60,534 vs US$ 67,426) were significantly lower for TAVI patients. There was a significant increase in the use of TAVI (26 cased per month in 2011 to 1,237/month in 2015) and a decrease in SAVR (1,409/month in 2011 to 859/month in 2015) during the study period. In-patient mortality significantly decreased for patients who underwent TAVI (4.4% in 2011 to 2.5% in 2015) and did not significantly change for patients who underwent SAVR (5.0% in 2011 to 4.7% in 2015). Overall, the number of SAVR procedures remained two thirds higher than TAVI. In conclusion, in octo- and nonagenarians, TAVI is an effective and safer alternative to SAVR as it is associated with lower in-hospital mortality, lower major in-hospital complications, lower 30-day readmission rate, and hospital costs. Despite this, SAVR remained the most common approach in octogenarians, although the trends in this data set, suggest a shift in practice patterns for this cohort.

全文链接：http://pan.ckcest.cn/rcservice//doc?doc_id=43730