## NCDR provides data to study appropriate use of oral anticoagulant therapy

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National Cardiovascular Data Registry provides data for published research studies

The American College of Cardiology's National Cardiovascular Data Registry was the source of data for research published throughout 2016, including a study examining if atrial fibrillation patients are being prescribed oral anticoagulants, how appropriate use criteria correlates to angioplasty rates and the variation among racial groups for revascularization procedures.

NCDR Study Shows In-Hospital Mortality Rate of CS-AMI Patients Continues to Rise

The in-hospital mortality rate among patients with acute myocardial infarction complicated by cardiogenic shock who underwent percutaneous coronary intervention (PCI) increased from 27.6 percent between 2005 and 2006 to 30.6 percent between 2011 and 2013, according to a study published Jan. 20 in JACC: Cardiovascular Interventions. Using data from the American College of Cardiology's CathPCI Registry, researchers assessed records from 56,497 patients between January 2005 and December 2012. Results showed that the use of bivalirudin instead of other anti-coagulants such as heparin increased (12.6 percent earlier vs. 45.6 percent later), while the use of an intra-aortic balloon pump declined (49.5 percent vs. 44.9 percent). In addition, in the 2005-2006 time period, 31.5 percent of patients had more than one lesion treated during PCI, while in the 2011-2013 period, the number decreased to 25.8 percent. Furthermore, only a small fraction of these patients had the procedure done via radial access. Read more: http://www.acc.org/latest-in-cardiology/articles/2016/01/20/16/25/ncdr-study-shows-in-hosp ital-mortality-rate-of-cs-ami-patients-continues-to-rise?w\_nav=LC

Are High-Risk Atrial Fibrillation Patients Receiving Recommended Oral Anticoagulant Therapy?

Outpatients with atrial fibrillation (AFib) may be more likely to be prescribed an oral anticoagulant as their number of stroke risk factors increase. However, less than half of high-risk patients at the highest ranges of stroke risk are prescribed an oral anticoagulant, according to a study published March 16 in JAMA Cardiology. Jonathan C. Hsu, M.D., M.A.S., and colleagues looked at 429,417 outpatients with AFib enrolled in the American College of Cardiology's PINNACLE Registry between January 2008 and December 2012. The researchers calculated the CHADS2 score and the CHA2DS2-VASc score for all patients, and examined the association between increased stroke risk score and prescription of an oral anticoagulant. Results showed that prescribed treatment consisted of an oral anticoagulant (44.9 percent of patients), aspirin only (25.9 percent), aspirin plus a thienopyridine (5.5 percent), or no antithrombotic therapy (23.8 percent). Each 1-point increase in risk score was associated with increased odds of oral anticoagulant prescription compared with aspirin-only prescription. However, a plateau of oral anticoagulant prescription was observed as oral anticoagulant prescription prevalence did not exceed 50 percent even in higher-risk patients with a CHADS2 score exceeding 3 or a CHA2DS2-VASc score exceeding 4. Read more: http://www .acc.org/latest-in-cardiology/articles/2016/03/16/15/44/are-high-risk-afib-patients-receiving-recommended-oac-therapy?w\_nav=LC

## Should TAVR be Performed in Nonagenarians?

Although nonagenarians had higher mortality rates following transcatheter aortic valvle replacement (TAVR) than their younger counterparts, quality-of-life data at one year may suggest its efficacy for selected patients, according to a study published March 21 in the Journal of the American College of Cardiology. Using data from the STS/ACC TVT Registry, researchers examined records from 24,025 patients, of which 3,773 patients were 90 or older, from 329 hospitals between November 2011 and September 2014. Results showed that at 30 days, the mortality rate was higher in the nonagenarian group (8.8 percent) than in the younger group (5.9 percent), as it was at one year: 24.8 percent vs. 22 percent. There was not, however, a statistically significant difference in stroke incidence at 30 days (2.9 percent vs. 2.4 percent) or at one year (4.4 percent vs. 3.9 percent). The 30-day KCCQ-12 score was slightly lower in nonagenarians compared to younger patients but was similar at one year. Read more: <a href="http://www"http://www"http://www"http://www"http://www"http://www"http://www"http://www"http://www"http://www</a>.acc.org/latest-in-cardiology/articles/2016/03/21/16/45/should-tavr-be-performed-in-nonagenarians?w nav=LC

NCDR Study Finds Lower PCI Rates Correlate to Appropriate Use

Geographic areas that perform the lowest number of percutaneous coronary intervention (PCI) procedures also perform appropriate procedures had a higher rate than those that perform a greater number of PCI, according to a study published in PLOS ONE. Furthermore, as the rates of appropriate PCI decrease, they increase for inappropriate and uncertain procedures, as well as for procedures not correlated to appropriate use criteria (AUC) established by the American College of Cardiology, the American Heart Association, and the Society for Cardiovascular Angiography and Interventions. Using data from the ACC's CathPCI Registry linked with a limited dataset from Medicare, researchers assessed 2,010 records from 380,981 patients from 178 heath referral regions, or health care markets with at least one hospital performing major cardiovascular procedures and neurosurgery. These regions were divided into quintiles, with "1" representing the lowest utilization of PCI and "5" representing the highest. Results showed that when stratified by clinical status, the rates for appropriate PCI to treat acute conditions were high across all quintiles (range between 95 percent and 96 percent). For non-acute conditions, the rate of appropriate PCI decreased from 27 percent in quintile 1 to about 22 percent in quintile 5, and the rate of inappropriate PCI increased from almost 12 percent to almost 13 percent. The rate of uncertain procedures also increased, from 20 percent to 23 percent. There was no difference in risk-adjusted mortality across quintiles. Read more: http://www .acc.org/latest-in-cardiology/articles/2016/07/07/10/02/ncdr-study-finds-lower-pci-rates-correlate-to-appropriateuse?w nav=LC

NCDR Study Shows Variation Among Racial Groups for Revascularization Procedures

Different approaches may be taken for carotid artery revascularization among patients from different racial and ethnic backgrounds, with a trend toward carotid artery stenting (CAS) among non-Hispanic whites and other groups (Native Americans and Asians) and endarterectomy (CEA) among Hispanics and blacks, according to a study recently published in Stroke. Using data from American College of Cardiology's CARE Registry, now the PVI Registry, researchers assessed records from 24,082 patients between May 2007 and Dec. 2012. Among these patients, 13,129 had carotid artery stenting and 10,953 had endarterectomy. Of those in the carotid artery stenting group, 89 percent were non-Hispanic whites; 4.4 percent were black; 4.3 percent were Hispanic; and 2 percent were from other groups. Researchers observed a similar distribution among patients undergoing endarterectomy: close to 93 percent were non-Hispanic whites; 3.5 percent were black; 2.8 percent were Hispanic; and 1 percent came from other groups. Results showed that patients who had undergone carotid artery stenting were prescribed aspirin and clopidogrel at a rate greater than 90 percent and statins at a rate of about 80 percent, with little difference among races. After endarterectomy, however, the rate of aspirin prescriptions was less than 90 percent, with a significantly lower rate for blacks and Hispanics. Prescription rates for statins after endarterectomy were significantly lower for non-Hispanic whites compared with Hispanics and other groups. Read more: http://www.acc.org/latest-in-c ardiology/articles/2016/07/07/09/52/ncdr-study-shows-variation-among-racial-groups-for-revascularization-proce dures?w nav=LC

NCDR data was also used in studies previously highlighted during this time period:

Heart Attack Patients with Cardiogenic Shock Fair Well 60 Days Post-Discharge

Read more: <u>http://www.acc.org/about-acc/press-releases/2016/02/18/10/29/heart-attack-patients-with-ca</u> rdiogenic-shock-fair-well-60-days-post-discharge?w\_nav=S

Stenting of Narrow Pulmonary Artery Benefits Patients with Congenital Heart Disease

Read more: <u>http://www.acc.org/about-acc/press-releases/2016/03/14/14/01/stenting-of-narrow-pulmonary-artery-benefits-patients-with-congenital-heart-disease?w\_nav=S</u>

U.S. Prediction Models for Kidney Injury Following Angioplasty Hold up in Japan

Read more: <u>http://www.acc.org/about-acc/press-releases/2016/04/04/15/04/us-prediction-models-for-kidney-injury-following-angioplasty-hold-up-in-japan?w\_nav=S</u>

Reasons for Hospital-Level Variations in Bleeding Post-Angioplasty Are Unclear

Read more: <u>www.acc.org/about-acc/press-releases/2016/04/18/14/47/reasons-for-hospital-level-variations-in-bleeding-post-angioplasty-are-unclear?w\_nav=S</u>

Study Identifies Aortic Valve Gradient as Key to TAVR Outcomes



Read more: <u>http://www.acc.org/about-acc/press-releases/2016/05/16/14/11/study-identifies-aortic-valve-gradient-as-key-to-tavr-outcomes?w\_nav=S</u>

AFib Patients at Risk for Stroke Often Prescribed Aspirin Instead of Anticoagulants

Read more: <u>http://www.acc.org/about-acc/press-releases/2016/06/20/13/47/afib-patients-at-risk-for-stroke-often-prescribed-aspirin-instead-of-anticoagulants?w\_nav=S</u>

Study Validates New In-Hospital Mortality Risk Model for Heart Attack Patients

Read more: <u>http://www.acc.org/about-acc/press-releases/2016/08/01/15/19/study-validates-new-in-hospital-mortality-risk-model-for-heart-attack-patients?w\_nav=S</u>

Beta-Blockers Following Angioplasty Show Little Benefit for Some Older Patients

Read more: <u>http://www.acc.org/about-acc/press-releases/2016/08/15/14/15/beta-blockers-following-angioplasty-show-little-benefit-for-some-older-patients?w\_nav=S</u>

Low Statin Use in People with Diabetes Despite Cardioprotective Effects, Guidelines

Read more: <u>http://www.acc.org/about-acc/press-releases/2016/09/12/14/14/low-statin-use-in-people-with-</u> <u>diabetes-despite-cardioprotective-effects-guidelines?w\_nav=S</u>

Source: American College of Cardiology

