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Nebraska ACC

SUPPORTING PHYSICIANS, TRAINEES, AND CARDIOVASCULAR TEAM MEMBERS WITH EDUCATION, ADVOCACY, & NETWORKING OPPORTUNITIES

Chapter News

Summer is here, and things are heating up at the Nebraska ACC!

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Governor, Nebraska ACC

- The Nebraska ACC 4th **Annual Meeting** will take place on Wednesday, October 20, 2021 at the Omaha Marriott from 4:30 to 8:30 pm. We are thrilled that **ACC President Dr. Dipti Itchhaporia** will travel to Omaha to deliver the keynote address. Register now! All are invited, whether or not you are an ACC member: cardiologists, nurses, NPs, PAs, pharmacists, and technologists.
- The Annual Meeting will also feature the 3rd annual **FIT Poster Competition** including podium presentations of the top 4 posters and cash prizes. Thanks to Nebraska ACC Education Committee Chair Dr. J. William Schleifer and FIT Section Chairs Drs. Swethika Sundaravel, Brett Van Briggle, Abhishek Thandra, and Kashif Shaikh for their hard work in planning the event. More information and submission instructions can be found on our website.
- Let's keep up the advocacy wins! Thanks to support from the Nebraska ACC and other state medical organizations, Nebraska **Legislative Bill 337** was passed, ending the nightmare of "fail first" medicine. The new law requires state-regulated health plans to provide a **clear exemption process from step therapy** with five-day turn-around time.
- The Nebraska ACC Advocacy Committee will be **meeting with State Senator John Arch** (District 14), chair of the Health and Human Services Committee, on June 14th to discuss his support for a candy and soda tax, telehealth coverage, and pharmacy benefit pricing regulation. Contact Executive Director Carmen Chinchilla to get involve in Nebraska ACC advocacy.
- The Nebraska ACC 1st **Annual Cardiovascular Team Meeting** was held on May 13, 2021 at the Happy Hollow Club. Thanks to CVT Representative Jessica Livingston, MSN, AAAC for a terrific inaugural event. E-mail Jessica to get involved in future CVT events.
- The **Nebraska ACC Bylaws** are being updated from their vintage 1992 form. E-mail voting to approve the new bylaws will occur shortly.
- We want to hear from YOU! Contact Dr. Anu Tunuguntla if you would like to **write for this Newsletter**. The Newsletter features four brief articles quarterly: Chapter News, Cardiology Update (by a cardiologist), FIT Corner (by a fellow in training), and CVT Corner (by a CV team member).
- Please **follow us** on Twitter and Facebook!

Nebraska CHAPTER

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CARDIOLOGY UPDATE

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UPDATES IN LIPID MANAGEMENT

Low density lipoprotein cholesterol (LDL-C) lowering has shown to decrease the incidence of atherosclerotic cardiovascular disease (ASCVD) and cardiovascular mortality in a continuous, positive and graded manner. With every 40mg/dl decrease in LDL-C, an approximate 22% reduction in the rate of major vascular events is seen [(1)].

Statins have been the cornerstone of lipid management for both primary and secondary prevention of ASCVD. High intensity statins (Atorvastatin 40mg or 80mg, Rosuvastatin 20 mg or 40 mg) that reduce the LDL-C by greater than 50% are indicated for patients with a history of ASCVD or stroke, LDL-C >190 mg/dl, patients with diabetes aged 40-75 years with an LDL-C between 70 and 190 mg/dl and 10-year ASCVD risk score of >7.5%, or in patients aged 40-75 years with a 10-year ASCVD risk >20% [(2)].

Patients between the ages of 40 and 75 years with either a 10-year ASCVD risk of >7.5% or a history of diabetes with an LDL ranging between 70 and 190 mg/dl would qualify for a medium intensity statin that would reduce the LDL-C by 30-50% [(2)].

For secondary prevention of ASCVD, if on maximally tolerated statin therapy the LDL-C is > 70 mg/dl, then addition of non-statin lipid lowering therapy is warranted to further reduce the ASCVD risk.

The first line non-statin LDL-C lowering drug is Ezetimibe, a Niemann-Pick C1 Like 1 protein (NPC1L1) inhibitor, that decreases the cholesterol absorption from the intestine. The IMPROVE-IT study showed the combination of Simvastatin 40 mg daily with ezetimibe 10 mg daily resulted in an additional 24% reduction of LDL-C and a 2% absolute risk reduction in the primary composite endpoint of cardiovascular death, major coronary events or non-fatal stroke at 6 years in patients with an acute coronary syndrome [(3)].

Proprotein convertase subtilisin/kexin type 9 (PCSK9) inhibitors are the new class of LDL-C lowering agents. They include the human monoclonal antibodies comprising of Evolocumab (140mg subcutaneous injection every 2 weeks or 420mg every 4 weeks) and Alirocumab (75 mg subcutaneous injection every 2 weeks up to 150 mg every two weeks or 300 mg once every 4 weeks). The small interfering RNA (siRNA) inhibitor Inclisiran is a PCSK9 inhibitor that is still being investigated. In addition to a 50-70% reduction of LDL-C, PCSK9 inhibitors result in up to a 50% reduction in cardiovascular mortality [(4)] and reduce atheroma volume [(5)].

Bempedoic acid, an inhibitor of adenosine triphosphate citrate lyase (enzyme in the cholesterol biosynthesis pathway) can help reduce the LDL-C by an additional 16.5% when given in addition to the maximally tolerated statin [(6)]. It is also available as a combination pill with ezetimibe.

REDUCE-IT trial showed that icosapent ethyl (VASCEPA), a highly purified eicosapentaenoic acid ethyl ester in addition to a statin, reduced the cardiovascular risk in patients with ASCVD or in diabetics with at least one cardiovascular risk factor by 25% at 4.9 years [(7)].

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FIT CORNER

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IMPACT OF COVID-19 PANDEMIC ON CARDIOVASCULAR FELLOWSHIP TRAINING- A FELLOW'S PERSPECTIVE

The Impact

The ongoing novel SARS-2 coronavirus 2019 (COVID-19) pandemic has burdened and tested our current healthcare system in the United States in an unprecedented manner. Many healthcare systems around the country needed to make several key changes in their day-to-day operations and healthcare delivery to prepare and meet the demands of the pandemic. All these changes along with general public directives to 'stay at home' and 'social distance' along with heightened public anxiety/fear of uncertainty have profoundly impacted our cardiovascular fellowship training and presented us with unique training and educational challenges.

Cardiovascular fellowship training alike many other surgical and procedural specialties greatly relies on in-person operative experience to achieve the required professional competency. Early in the pandemic the Center for Disease Control and Prevention (CDC) and other oversight bodies have advised to cancel all elective and non-emergent surgical cases to help repurpose staff and resources and help the public comply with the "stay at home" directives that were in place.(1,2) Many cardiology practices particularly the interventional cardiology practices across the nation saw a dramatic reduction in volumes of procedures performed.(3,4) Apart from the decreased procedural volumes, there was also a simultaneous decline in the number of patients seeking acute medical attention for even emergencies such as acute coronary syndromes (ACS) probably driven by the fear of contacting COVID-19 when seeking care.(5) As we embarked on our training in July of 2020, there was a great deal of uncertainty about future trajectory and quality of our training further compounded by anxiety of contacting COVID-19 and getting sick during training.

Thinking Outside the Box

A myriad of changes were implemented by our graduate medical education (GME) and program leadership to ensure compliance with the social distancing protocols and minimize disruptions to our training and educational experience. Our program quickly adapted to the ongoing crisis, and 'Zoom' or virtual didactics and presentations along with supplementation of clinical visits with 'telehealth' encounters became the new norm. Back up call schedules to ensure uninterrupted patient care along with 'social distancing' and 'masking' protocols especially in public places such as cafeterias and breakrooms were quickly implemented to protect staff and curb the spread. Doffing and donning of personal protective equipment (PPE) protocols along with patient care protocols for use of telehealth equipment were also quickly implemented to protect staff and minimize unnecessary direct contact when caring for COVID +ve patients requiring Cardiology consultations. Expedited testing and specific quarantining/reporting protocols were facilitated to help quickly triage potential infections among fellows and staff and minimize interruptions in our training. Nevertheless, despite all the efforts by our programs and graduate medical education (GME) to 'soften the blow' of the pandemic and its impact on our training, the stress of being a frontline essential health care provider along with loss of educational opportunities during training is real and can overwhelm the trainee with feelings of burnout.(6)

The Silver Lining

Although we saw a drastic decrease in elective case volumes, the pandemic also brought about opportunity to care for complicated cases such as late presenting ACS with mechanical complications that are rare to see in this contemporary era of PCI.(7) The ACGME has also acknowledged that trainees in the procedural specialties might not be able to achieve the minimal specialty-specific case requirement during the pandemic and emphasized that PDs and clinical competency committees could continue to evaluate individual trainee's competency prior to entering unsupervised practice providing added flexibility.(8) As we weathered through the initial peaks of the pandemic, the case and procedural volumes also slowly started normalizing to the pre-pandemic levels. This along with the rapid development and availability of new m-RNA based vaccines to the front-line health care workers greatly helped to alleviate the anxiety of providing care during the pandemic and rendered a sense security along with a ray of hope that slowly but surely things are heading towards more of a 'normalcy'.

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FIT CORNER (CONTINUED)

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CVT CORNER

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NEBRASKA MEDICINE LEADING THE WAY WITH NEW INNOVATIVE APPROACH TO HEART TRANSPLANTATION

While the many challenges of the COVID pandemic caused much of the medical community to slow, thanks to adapting new systems at Nebraska Medicine, heart transplantation has not. For the Heart Transplant Team at Nebraska Medicine, entering into 2021 is proving to be one of the most exciting times in transplant. With a goal of saving the lives of patients awaiting new hearts, the program adopted a new approach for performing transplants using organs from donation after circulatory death (DCD) donors.

Traditionally, heart transplantation utilizes donors that meet classical brain death criteria. A DCD donor is an individual who meets criteria to gift their organs after their heart has stopped and circulatory death has occurred, but whose organs previously were not utilized as they don't meet the classical definition of brain death. DCD donors are taken to a controlled environment where support is withdrawn, and they are allowed to pass. Once the heart stops there is a 'no touch' time period (usually 5 minutes) before the heart is reanimated and perfused to then be used for transplant as long as organ function appears suitable for donation.

Nebraska Medicine is participating in two studies that utilizes DCD donors: the TransMedics OCS study (often referred to as "heart-in-a-box") and the thoracoabdominal normothermic regional perfusion (TA NRP) study - an investigator initiated study led by Marian Urban, MD, PHD. Apart from Nebraska Medicine, there is currently only one center in the world with a TA NRP heart program for distant DCD donors.

Because of Nebraska Medicine's innovation in performing DCD heart transplants, the donor pool has widened and saved seven additional patients since the start of 2021. The organization is on track to save a record number of lives in the history of the heart transplant program.

ACC CV TEAM NEWSLETTER

Did you know? The ACC has a monthly newsletter for CV Team Members. Click on the link below to learn more about what is happening on the national stage!

Read the ACC CV Team Newsletter here!

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NEBRASKA ACC ANNUAL MEETING INVITATION

NEW PHYSICIAN WELLBEING PROGRAM AVAILABLE TO ALL NEBRASKA PHYSICIANS

LIFEBRIDGE NEBRASKA—NEBRASKA'S PHYSICIAN WELLNESS PROGRAM

The Nebraska Medical Association has launched their peer-to-peer physician coaching program LifeBridge Nebraska. LifeBridge Nebraska was developed by physicians, for physicians. It is a FREE coaching program available to all Nebraska physicians, regardless of NMA membership. The NMA hopes Nebraska physicians will reach out as a normal response to acute and chronic stress rather than just "powering through."

Confidential appointments are self-referred without medical diagnoses, insurance billing, or electronic records. Notification is not given to employers, NMA, or the board of medicine. Program participants can expect complete confidentiality –information and/or identity is never disclosed to others without written consent.

Physicians can connect with LifeBridge Nebraska by calling a confidential third-party call center at 1-888-569-2036. To learn more and to view coach profiles, please visit nebmed.org/lifebridge. Questions? Please contact Betsy Jones at betsyj@nebmed.org.