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Nebraska ACC

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

Chapter News

Dear Nebraska Chapter ACC Members,

It is an honor to introduce myself as the newly appointed Governor of the Nebraska Chapter of the American College of Cardiology. My name is Anu Tunuguntla and I am excited to have the opportunity to work with such an esteemed group of professionals dedicated to improving cardiovascular care in our state.

I would like to take a moment to express my gratitude to Andrew Goldsweig, who served as Governor of our chapter for the past 3 years. Dr. Goldsweig has been a dedicated and effective leader, and I want to thank him for his contributions to the Nebraska Chapter ACC. His commitment to advancing the practice of cardiology in our state has been instrumental in our chapter's success, and we are fortunate to have had him as our leader.

As a member of the American College of Cardiology (ACC), you have access to numerous resources and opportunities to advance your career and improve cardiovascular care. I would like to invite you to get involved with three committees that are making a significant impact in the field of cardiology: Education, Advocacy, and Women in Cardiology.

→The Education Committee focuses on developing and providing educational resources for ACC members. As a member of this committee, you would have the opportunity to contribute to the development of educational programs, webinars, and other resources that help advance cardiovascular care.

→The Advocacy Committee is dedicated to advocating for policies and legislation that improve cardiovascular health for all patients. As a member of this committee, you would have the opportunity to participate in advocacy efforts and help shape policy that advances cardiovascular health.

→The Women in Cardiology Committee focuses on advancing the role of women in cardiology and improving the professional development of female cardiologists. As a member of this committee, you would have the opportunity to participate in networking events, mentorship programs, and other initiatives that support women in the field of cardiology.

By joining any of these committees, you will have the opportunity to contribute to the advancement of cardiovascular care, gain valuable experience and knowledge, and network with other professionals in your field.

Thank you for your continued support of the American College of Cardiology, and I hope to see you getting involved with our committees soon.

Planning has begun for the Nebraska ACC 3rd Annual Cardiovascular Team Meeting on May 11, 2023 at the Happy Hollow Club. Contact CVT Representative **Jessica Livingston**, MSN, AAAC to get involved in this and future CVT events.

We want to hear from YOU! Contact **Dr. Arun Kanmantha Reddy** 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](#)!



Anuradha Tunuguntla
MD, FACC, FSCAI
Governor, Nebraska ACC



Nebraska
CHAPTER

CARDIOLOGY UPDATE



PRAKRITY URJA MD, FACC
Faith Regional
Cardiovascular Institute

GO RED FOR WOMEN

"Go Red for Women" is an initiative started by the American Heart Association in 2014 to bring awareness regarding women's heart health. Women constitute 48.1% of the cardiovascular mortality in the United States and the Go Red for Women program was launched to increase awareness of cardiovascular disease (CVD) among women regarding gender-specific risk in addition to traditional risk factors[1]. Our article will briefly discuss the gender-specific differences in cardiovascular health in women.

Gender-related risk factors of cardiovascular disease in women

Adverse pregnancy outcome increases the cardiovascular risk by 1.8 - 4 fold. Vascular abnormalities related to adverse pregnancy outcomes, like placental dysfunction and abnormal endothelial function, are the early predictors of future cardiovascular events [2]. Preeclampsia increases the risk of hypertension by 3.7 times, ischemic heart disease by 2.2 times, stroke by 1.8 times, and overall mortality by 1.5 times [3]. Gestational diabetes increases the risk of type 2 diabetes mellitus by 1.4-20 times, ischemic heart disease by 2.8 times, stroke by 2 times, and hypertension by 2 times [4]. Preterm, defined as delivery before 37 weeks, indicates increased cardiovascular risk to the mother. All of the above can help in the early identification of high-risk groups in younger patients [5]. Intrauterine growth restriction (IUGR) is often related to hypertensive disease but can also be seen in normotensive pregnancies. The IUGR associated with normotensive pregnancy has also been linked with higher CVD risk, diastolic dysfunction, and poor cardiac reserve.[6] Similarly, CVD risk increases 1.45 times with a history of miscarriage and stillbirth. Estrogen withdrawal situations like early menopause (i.e., menopause before 40 years) have been included as the risk enhancer for treating hyperlipidemia. [7] Hyperandrogenism and ovarian dysfunction like polycystic ovarian syndrome are not directly related to the increased CVD risk. However, the metabolic syndrome associated with this condition is a known risk factor for CVD.

Cardiovascular risk and use of Hormone replacement therapy (HRT).

HRT has been related to increased cardiovascular disease with risks more than benefits. The risk increases after > 10 years from menopause [8]. The current recommendation is to use HRT in perimenopausal and early menopausal women for vasomotor symptoms but not for CVD prevention [9].

Gender-specific differences in clinical features and presentation of the CVD

Chest pain continues to be the leading presentation of coronary artery disease in females, but females are more likely to have other nonspecific complaints like fatigue than males. NSTEMI with unusual pathophysiological etiology like spontaneous coronary artery dissection, coronary spasm, and microvascular disease is more common among females than males [10]. In aortic valve stenosis, the female presents with more severe disease with less calcium density mainly because of more fibrosis in the stenosed valve than males[11]. Men have more normal-flow or classical low-flow aortic stenosis with LV eccentric hypertrophy and focal fibrosis. In contrast, females have a higher tendency of paradoxical low-flow aortic stenosis with concentric remodeling /hypertrophy and diffuse fibrosis [12]. Similarly, the epidemiology of the mitral valve disease differs in males and females. Sex-based disparities in valvular heart disease with the delayed referral of the female results in worse outcomes and higher mortality in females [13].

Gender-specific preventive recommendation for the women

Recent guideline for primary prevention of CVD in women have recommended cardiovascular risk screening within three months of postpartum in a patient who has hypertensive disorders of pregnancy, gestational diabetes mellitus, intrauterine growth retardation, preterm birth, placental abruption, obesity, excessive pregnancy weight gain, postpartum weight retention, moderate to severe obstructive sleep apnea, and maternal age more than 40 years [9]. Women-specific conditions like preeclampsia and premature menopause have been included in the ASCVD risk-enhancers [7]. Often understanding the gender-based differences in the clinical features and the pathophysiology helps implement better patient care.

In summary, women represent a vastly diverse population with variable and heightened cardiovascular risk. Therefore, it is important to address and educate our communities and physicians regarding the early screening of CVD among women.

CARDIOLOGY UPDATE (CONTINUED)

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CVT CORNER



Lecia Snell-Kinen, MSN, RN,
Clinical Program
Coordinator,
Heart and Lung Transplant
Nebraska Medicine

EXPANDING THE DONOR POOL FOR HEART TRANSPLANTATION USING DONATION AFTER CIRCULATORY DEATH (DCD)

Heart transplantation is an important treatment option for patients with New York Heart Association (NYHA) Functional Classification stage IV that is not amenable to guideline-directed medical therapy (GDMT) and other surgical interventions. Unfortunately, access to transplantation is limited only by the number of suitable donor hearts available.

Recent efforts to expand the donor pool have included the use of donation after circulatory death (DCD) donors. Prior to the option of DCD recovery, the preferred donor had to meet brain death criteria otherwise known as donation after brain death (DBD). In DCD recovery, the potential donor does not meet brain death criteria because they continue to have some brain stem reflexes. However, like donors in DBD recovery, the DCD donor is also ventilator dependent with a poor prognosis for any recovery. When DCD recovery is utilized, organ procurement organizations (OPO) utilize the same standardized protocols to obtain authorization for donation. Prior to DCD recovery, these organs would not have been made available for transplantation thus increasing the donor pool.

Historically there were concerns regarding DCD recovery due to the risk of warm ischemic damage to the cardiac tissue throughout the dying process and death and up to the time of heart recovery. It was thought that these organs may be too damaged to transplant due to increased ischemic time. However, several studies have documented that there is no difference in transplant outcomes when using DCD vs. DBD donors (Urban, et al., 2023; D'Alessandro, et al. 2022, Madan, et al. 2022).

Other benefits of DCD have been recognized. The heart transplant program at a midwestern academic hospital started accepting DCD heart donors in 2021. They report that the use of DCD donor hearts resulted in reduced waitlist time and an increased transplant rate. Also noted is that DCD donation increases organ availability to recipients in lower status categories and can provide comparable short-term post-transplant outcomes to DBD (Urban et al., unpublished).

Heart transplantation will continue to be a life-saving treatment for end-stage heart failure patients. Continued research on the impact of utilizing DCD donors, recovery strategies, and post-transplant outcomes will continue to further expand the donor pool.

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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!](#)

SAVE THE DATE! CV TEAM MEMBERS SPRING MEETING 2023

Join the Nebraska ACC CV Team members at the third Annual Spring Meeting 2023. The event will take place at Happy Hollow Club in Omaha the evening of Thursday, May 11, 2023. Additional details and registration will be available at a later date on our website at www.nebraskacardiology.org.

Read the ACC CV Team Newsletter [here!](#)

ACC'S LEGISLATIVE CONFERENCE TAKING PLACE
OCTOBER 15-17!

LEGISLATIVE CONFERENCE

OCTOBER 15 - 17, 2023

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We are looking forward to welcoming everyone back to DC for the 2023 Legislative Conference. The meeting will offer cardiovascular clinicians spanning the entire care team a chance to hear from ACC leaders, staff and other experts on health policy issues affecting patients and the profession, while also providing an important opportunity to speak directly with members of Congress and their staff. Learn more about the upcoming ACC legislative conference [here!](#)

NEBRASKA ACC NEWSLETTER STAFF

**ANURADHA
TUNUGUNTLA, MD**



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Nebraska ACC**

**ARUN
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