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## Jefferson Cardiology Association Happenings

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### TAVR for All Aortic Stenosis Patients?

In 2002, a French interventional cardiologist performed the first aortic valve replacement without surgery in a critical patient doomed for death. This technique, TAVR, transcatheter aortic valve replacement, has been adapted worldwide for persons at high risk for surgery who have critical aortic stenosis. Aortic stenosis refers to narrowing of the aortic valve through which all blood must pass to be sent to the entire body including such vital organs as the brain and kidneys. Severe narrowing of this valve is life threatening and can be compared to pumping the entire blood supply through a keyhole.

Subsequently, a number of studies demonstrated the safety of this procedure in patients at high risk for aortic surgery. This procedure involves the passage of a device from the leg or a direct heart puncture to avoid the stress of open heart surgery. As this procedure has become more widely available the question has arisen whether this procedure can be made available to aortic stenosis patients who were no high risk surgical candidates and wished to avoid open heart surgery.

A study addressing this concern was published in the May 26 issue of the *Journal of the American College of Cardiology*. This study involved two centers in Denmark and one in Sweden. Specifically patients over age 70 with severe aortic stenosis and no coronary artery disease were randomized to either TAVR or conventional aortic valve surgery. The recruited patients were all comers and not just high surgical risk patients.

After one year, there was no difference between the TAVR and surgical

group in terms of death, stroke or heart attack. The patients treated with TAVR required more pacemakers, had a larger valve opening and appeared to have the greater improvement in ability to do physical tasks. However, the TAVR patients had more leakage of the aortic valve. Surgical patients had more serious bleeding, cardiogenic shock, acute kidney injury and new onset or worsening atrial fibrillation.

Does this study indicate that TAVR should be made available to all patients with aortic stenosis? Not so fast say the editorialists from the Cleveland Clinic.

First, the editorialists note that less than 20% of patients screened participated in this study raising the question that an insufficient number of patients were studied to provide statistical definitive results. Also, the incidence of leakage of the aortic valve was four times more frequent in TAVR patients. Until the technique becomes more effective at reducing valve leakage, the procedure may not be appropriate for low surgical risk patients. Also, 38% of TAVR patients require pacemakers within one year compared to 2.4% of surgical patients.

In short, it was argued that the TAVR technique and implanted valves need to be improved before becoming available to all aortic stenosis patients. Meanwhile, a new transcatheter valve, SAPIENS, was recently presented at the annual American College of Cardiology meeting with excellent results including 30 day 1% mortality and stroke rate of 3%. There were opinions at the meeting that TAVR will be the preferred proce-

cedure for patients over 80 with aortic stenosis in the near future.

### **Lose Weight and Avoid Atrial Fibrillation**

A recent study gained much publicity by evaluating the effect of weight loss and weight fluctuation on atrial fibrillation. In this study, 355 overweight patients with atrial fibrillation were studied. Patients who lost 10% of their weight were compared with those who lost less weight. Participants with 10% weight loss were noted to have significant reduction in long term recurrence of atrial fibrillation. However, those with fluctuation of weight greater than 5% had greater than twofold greater likelihood of recurrent atrial fibrillation. Associated with weight loss were less problems with diabetes, hy-

pertension and sleep apnea as well as less evidence of markers of blood vessel inflammation.

Editorialists concluded that weight loss is an important tool in the treatment of and reduction of atrial fibrillation. This should be pursued along with other forms of therapy. It was projected that reducing the epidemic of obesity will reduce problems with atrial fibrillation.

### **Staff News**

Please join us in wishing our senior partner and founder, Dr. Bramowitz, a very happy birthday. Enjoy your day!

### **Happy Father's Day**

We at JCA would like to wish all the Fathers of our practice a very happy and safe Father's Day.

### ***Chicken with Honey-Beer Sauce***

- 2 teaspoons canola oil
- 4 (6-ounce) skinless, boneless chicken breast halves
- ¼ teaspoon freshly ground black pepper
- 1/8 teaspoon salt
- 3 tablespoon thinly sliced shallots
- ½ cup beer
- 2 tablespoons lower-sodium soy sauce
- 1 tablespoon whole grain Dijon mustard
- 1 tablespoon honey
- 2 tablespoons fresh flat leaf parsley leaves

1. Heat a large skillet over medium-high heat. Add oil to pan; swirl to coat. Sprinkle chicken evenly with pepper and salt.
2. Add chicken to pan; sauté 6 minutes on each side or until done. Remove chicken from pan; keep warm
3. Add shallots to pan; cook 1 minute or until translucent. Combine beer and next 3 ingredients (through honey) in a small bowl; stir with a whisk. Add beer mixture to pan; bring to a boil, scraping pan to loosen browned bits. Cook 3 minutes or until liquid is reduced to ½ cup.
4. Return chicken to pan; turn to coat with sauce. Sprinkle evenly with parsley.

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