

# TO YOUR HEART!



## Breakthroughs Big, Bold & Beneficial!

By Narendra Singh MD



**C**ardiology has always been a major focus of research and development. This year we have seen some very important breakthroughs that are worth reporting. While I can't hope to review all the advances I will highlight a few.

**LOWERING BAD CHOLESTEROL** While diet and exercise are always the first step, for many patients this is not enough. Statins have been the major class of drugs used to lower bad cholesterol (LDL). Overall these drugs are very safe, effective, and in many cases life-saving. However, for some patients the side effects of muscle aches, memory impairment, high sugars or elevated liver enzymes prevent their use. Two companies have developed an injectable drug that can be taken either once a month or every two weeks, and have the same LDL lowering ability that the top doses of statins can deliver! Alirocumab (Praluent) is the first to be approved and Evolocumab (Repatha) will likely be approved later this month. The side effect of these injectable agents is very favorable but cost will be a limiting factor.

**IMPROVING HEART FAILURE SURVIVAL** We are fortunate to have a number of drugs (beta-blockers, ACE inhibitors, ARB's and aldactone) that improve survival in patients with congestive heart failure. Unfortunately for many, this is still not enough. Heart failure has a mortality rate that is worse than most cancers. Last month a new class of medication called ARNI was approved. In patients with a low ejection fraction (less than 40 %) this combination pill sacubitril-valsartan (Entresto) improved chances of survival by 20% over the next two years! The drug would be used in place of the ACE inhibitor or ARB.

**PREVENTING STROKES IN ATRIAL FIBRILLATION** The last four years saw the development of four new alternative blood thinners that could replace warfarin in preventing strokes in patients with the rhythm disturbance called atrial fibrillation. All four agents—Pradaxa, Eliquis, Xarelto and Savaysa—are safer and at least as effective as warfarin. However, for some patient all blood thinners are unsafe. This year an implantable device called Watchman has been approved. It can be inserted with a catheter into the heart's left atrial appendage and will prevent strokes without the need for any blood thinners.

**REDUCING FUTURE HEART ATTACKS** After a first heart attack, despite the use of stents, surgery and multiple drugs, patients continue to be at risk for future heart attacks, stroke and death. Aspirin has been the main blood thinner used to reduce this risk but now two new anti-platelet drugs vorapaxar (Zontivity) and ticagrelor (Brilinta) have been shown to further reduce the risk when added to aspirin indefinitely! Careful monitoring for bleeding is of course needed.

**WEIGHT LOSS TO REDUCE ATRIAL FIBRILLATION** While many of the advances noted above are expensive options the LEGACY study showed the value of a healthy lifestyle. A goal directed weight loss program resulting in > 10% weight loss resulted in a 6-fold decrease in the recurrence of atrial fibrillation. Weight fluctuations > 5% however increased the risk of atrial arrhythmias.

As always, consult with your health care provider to see if any of these new therapies is right for you or contact us at [research@ahsmed.com](mailto:research@ahsmed.com). ■

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