Jefferson Cardiology Association Happenings

Blood Pressure Controversy

What should ideal blood pressure goals be for hypertensive patients? In 2013, the Eight Joint National Committee released new guidelines that led to controversy by relaxing previous goals of therapy. Specifically, there was the recommendation, based on studies to date, that for persons over age 60 and younger persons with diabetes and kidney disease that blood pressure should be treated to target of 150/90 and to 140/90 in everyone else. At that time, many experts thought these guidelines were too lax. The European Society of Hypertension and the European Society of Cardiology recommend treatment to blood pressure under 140mm of mercury.

A bombshell effect was created this September when the results of the Systolic Blood Pressure Intervention Trial, SPRINT, were released. In this trial, investigators reported that treating high risk hypertensive adults age 50 and older to a blood pressure of 120mm of mercury reduced cardiovascular events by 30% and all cause mortality by 25 % compared with treatment to 140mm of mercury. The persons studied had one additional risk factor or preexisting kidney disease.

This study was sponsored by the National Heart, Lung and Blood Institute and involved 9300 patients from 100 centers in the U.S. and Puerto Rico. Physicians were given flexibility in selection of the indications. Those with diabetes and prior stroke were excluded.

In the intensive treatment group designed to lower blood pressure to 120mm of mercury, the patients were treated with 3 or more medications including medications such as chlorthalidone, amlodipine and lisinopril which have been shown both to lower blood pressure as well as reduce cardiovascular complications and mortality. In the less intensive treatment group, patients were treated with an average of 2 medications.

The study was stopped prematurely because of the dramatic reduction in complications of high blood pressure in the more intensely treated group of patients. A substudy is being continued to determine whether more intense blood pressure treatment reduces the chance of development of dementia. Time will tell how U.S. physicians respond to this study and if the benefits of more intense treatment provide the benefits seen in this study.

Cost Effectiveness of New Medications

This is a year in which several new medications with dramatic results in research studies have been approved by the FDA and appear to hold great promise. But concern has been raised about the cost of these medications and whether they are cost effective. Over the years, there has been a statistical model developed to assess whether specific medications or treatments are cost effective.

Controversy about cost has arisen about 2 new drugs treating high cholesterol. These drugs have had dramatic results and can be used with or in place of statin medications. However, these drugs produced by Amgen and

Sanofi cost $14,100 to $14,600 annually. Are these medications worth this cost?

Using the statistical model mentioned above, these medications would be cost effective for treatment of those with genetically high cholesterol at $2,100 per year. For those with cardiovascular disease unable to get to cholesterol target with maximal statin therapy, the cost effective price would be $2,400 per year. For those with cardiovascular disease unable to tolerate statin therapy, the cost would need to be $2,600 per year.

By comparison, the new drugs are priced at $6,800 per year in the United Kingdom and $8,200 per year in Austria.

Of great concern is whether the U.S. can afford these medications. If only 25% of eligible patients took this medication, the cost to the health care budget would be $19 billion per year or almost $100 billion over 5 years. Is this additional cost affordable?

In response to this report, Amgen disagrees with the finding and Sanofi is still studying the data. Nothing has been offered by these two companies about price reduction. Meanwhile, other new medications to reduce cholesterol are being studied.

Antidote for PRADAXA

In recent years, a number of new blood thinning medications have been approved. These drugs have been shown in research trials to be safer than coumadin. Approval has been given for patients with atrial fibrillation and leg vein blood clots. One of the popular concerns about these new agents is the lack of an antidote. Pradaxa was the first such drug approved and differs in method of action when compared with Xarelto, Eliquis and Savaysa. Now there are reports of an antidote to Pradaxa.

There is a report in Europe of this new antidote. Patients requiring emergency surgery or invasive procedures could safely be sent for these procedures 1.7 hours after the intravenous antidote injection. Previously, the only method of reversing Pradaxa was hemodialysis. Because of the difference in medications, Xarelto, Eliquis and Savaysa are not cleared by dialysis. Since the effects of Pradaxa are largely gone in 24 hours, the antidote can be used in those who need immediate reversal. There is no report yet of an antidote to the other new blood thinners.

Staff Birthday

We would like to extend a very Happy Birthday to Diane Ranallo, medical assistant.

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