Aspirin Resistance Attributed to Noncompliance

**BY JANE SALODOF MCNEIL Senior Editor**

ATLANTA — Noncompliance is the main cause of aspirin resistance, according to investigators who studied aspirin response in 230 people, most of whom had a history of myocardial infarction. The study, which was published online at www.hematology.org, involved 33 participants who were diagnosed with coronary artery disease and mental health was assessed by the Structured Clinical Interview for DSM-IV—Nonpatient version for patients who were aged 18 years or older. Physical health was assessed by a form of physical abuse, emotional abuse, sexual abuse, or general trauma, which also seen between high LTI scores and CHD and depression, according to Dr. Schwartz. But when the LTI score was high, the participants had a 5% increased risk for childhood trauma had about 18% rate in the top quartile and CHD and depression disorder, major depressive disorder, panic disorder, and generalized anxiety disorder, according to Dr. Schwartz and his colleagues. They studied 360 male twins (180 pairs, who were told not to take aspirin for 7 days. After the 7 days, they removed 45 from the study because they were not compliant with the protocol during the withdrawal period.

This left 185 participants—146 with a history of MI and 39 normal controls—in whom aspirin response was measured with platelet prostaglandin agonist (PPA) stimulated light aggregometry. The participants were divided into quartiles based on their ETI scores.

In my way of thinking, there are no people other than NANSAD people that you can label as truly aspirin resistant based on genetics or some other prior inability to respond to aspirin. Dr. Schwartz, professor of medicine, Michigan State University, East Lansing, said in an interview alongside his poster. “Once a person is identified with a history of childhood trauma, that person needs to be monitored very closely. Our data [suggest] that childhood trauma may be a key history to ask about,” said Dr. Vaccarino, a professor of medicine and epidemiology at Emory University, Atlanta.

The study by Dr. Vaccarino and her associates used 360 male twins (180 pairs, either mono- or dizygotic) who were born in 1946-1956 and were enrolled in the Vietnam Era Twin Registry. The participants were all interviewed at Emory University. They were assessed using the Early Trauma Inventory (ETI), a measure of traumatic events occurring before age 18 years, and the Late Trauma Inventory (LTI), a measure of traumatic events that occur when a person is aged 18 years or older. Physical health was assessed by examination, and mental health was assessed with the Structured Clinical Interview for Psychiatric Disorders. In all, 33 participants were diagnosed with coronary heart disease (CHD), 82 were diagnosed with major depressive disorder, and 23 had posttraumatic stress disorder. The participants were divided into quartiles based on their ETI scores.

While the seven low responders had a decrease that was less than one standard deviation, the investigators suggested they might not be a distinct population but the bottom of a normal bell-shape distribution curve. “If there was a separate group of patients that were aspirin resistant, this would show a subgroup in which there was a poor response,” he said.

In an earlier phase of the study, he said, arachidonic acid failed to show the expected aspirin inhibition in 17 of 192 heart attack patients who had been prescribed aspirin. All but one showed aspirin inhibition when they were retested 2 hours after being observed taking aspirin, however. The 1 patient admitted to taking a NANSAD in violation of the protocol, leaving the investigators to conclude that the other 16 were not aspirin resistant but rather were noncompliant with their prescribed aspirin use.

Dr. Schwartz said that patients should be counseled about the importance of aspirin to their survival. “Apirin is one of the most effective drugs we have in terms of platelet inhibition.”

Childhood Trauma Boosts Risk of CHD, Depression

**BY MITCHELL L. ZOLER Philadelphia Bureau**

VIENNA — Childhood trauma was an independent predictor of coronary heart disease and major depression later in life in a study with 360 men. “Childhood trauma can have important consequences, but it is a risk factor that physicians don’t usually think about,” Dr. Viola Vaccarino said while presenting a poster at the annual congress of the European Society of Cardiology. “Once a person is identified with a history of childhood trauma, that person needs to be monitored very closely. Our data [suggest] that childhood trauma may be a key history to ask about,” said Dr. Vaccarino, a professor of medicine and epidemiology at Emory University, Atlanta.

The analysis showed that the men in the three lowest ETI quartiles had a 6% prevalence of CHD compared with an 18% rate in the quartile with the highest ETI score. When adjusted for age and smoking history, the men in the highest quartile for childhood trauma had about a twofold increased rate of CHD, compared with men with lower ETI scores, a statistically significant difference.

A second analysis showed that men in the quartile with the greatest childhood trauma were also about twice as likely to have major depression (36%), compared with men with lower ETI scores (18%), also a significant difference, said Dr. Vaccarino, who is also director of EPICORE (Emory Program in Cardiovascular Outcomes Research and Epidemiology).

Initially, an excess of CHD and depression was also seen in men who had high scores on the LTI. But when the LTI analysis was adjusted for the prevalence of early trauma, the link between the LTI score and CHD and depression disappeared. In contrast, a strong link was also seen between high LTI scores and posttraumatic stress disorder, but this link was not affected by adjustment for ETI scores.

Childhood trauma can occur in the form of physical abuse, emotional abuse, sexual abuse, or general trauma, which is caused by events such as earthquakes and car accidents. The scientific findings suggest that primary care physicians should routinely ask patients about their trauma exposures as children. They may even want to administer the ETI, which has recently been streamlined to a single-page questionnaire, Dr. Vaccarino suggested in an interview.

Implantable Cardioverter Defibrillators Can Trigger Psychiatric Sequelae

**BY MITCHELL L. ZOLER Philadelphia Bureau**

VIENNA — Psychiatric assessment of 82 Turkish patients who had received implantable cardioverter defibrillators showed that the recipients had a high prevalence of sexual dysfunction, posttraumatic stress disorder, major depressive disorder, panic disorder, and generalized anxiety disorder. Dr. Yalug said while presenting two posters at the annual congress of the European Society of Cardiology.

Psychiatric assessment and counseling should be part of routine follow-up after implantable cardioverter defibrillator (ICD) placement, said Dr. Yalug, a psychiatrist at Kocaeli (Turkey) University. As part of this work-up, patients should be assessed and informed that sexual activity will not boost their risk of an ICD shock, she added.

Dr. Yalug and associates studied patients at risk for lethal ventricular arrhythmias who received ICDs for either the primary or secondary prevention of a sudden cardiac event at Kocaeli University during 2002-2006. The group included 69 men and 13 women, with an average age of 59 years. All patients had their ICDs for at least 3 months.

Patients were assessed using sociodemographic and psychiatric questionnaires, including the Structured Clinical Interview for DSM-IV and Arizona Sexual Experience Scale. The traumatic event that triggered PTSD was either a ventricular arrhythmia or the placement of the ICD. Patients also showed a high prevalence of multiple disorders. About 60% of the patients with depression also had PTSD; about 40% of those with PTSD also had depression.

We saw a high rate of concern about sexual activity in these patients,” Dr. Yalug said. “To improve quality of life and reduce anxiety, patients should be assessed and counseled about sexual activity as soon as possible after ICD placement.” Avoiding sexual activity may lead to some of the other sequelae seen in this study, such as depression, she said.

While the seven low responders had a decrease that was less than one standard deviation, the investigators suggested they might not be a distinct population but the bottom of a normal bell-shape distribution curve. “If there was a separate group of patients that were aspirin resistant, this would show a subgroup in which there was a poor response,” he said.

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