Fish Oil Therapy Suppresses Atrial Fibrillation

BY BRUCE JANCIN

Denver Bureau

NEW ORLEANS — Starting treatment with fish oil capsules several days before elective coronary artery bypass graft surgery resulted in a greater than 50% reduction in the incidence of postoperative atrial fibrillation in a 160-patient randomized trial, Leonardo Calo, M.D., said at the annual meeting of the Heart Rhythm Society.

In a second favorable Italian fish oil study presented at the meeting, Francesco Biscione, M.D., reported that treatment with omega-3 fatty acids reduced the burden of paroxysmal atrial arrhythmia by 67% in a group of pacemaker patients who were seriously affected by this rhythm disorder.

Dr. Calo explained that on the basis of clinical evidence suggesting omega-3 fatty acids have a suppressive effect upon ven-

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tricular arrhythmias, he and his coinvestigators at San Filippo Neri Hospital in Rome hypothesized that fish oil supplements might exert a similar beneficial effect with regard to atrial fibrillation (AF). They randomized 160 consecutive pa-

tients scheduled for coronary artery bypass graft (CABG) surgery to 2 g/day of omega-3 fatty acids starting at least 5 days preoperatively, or to a control arm.

Postoperative AF—a common and costly complication of cardiac surgery—developed in 33% of patients in the control arm and only 15% of patients on fish oil capsules. This translated into a 54% reduction in the incidence of the arrhythmia.

Since postoperative AF spells longer hospitalization, it was no surprise that the mean length of stay in the fish oil group was nearly a full day shorter—7.3 days as compared to 8.2 days in controls.

Perioperative β -blocker therapy has also been reported to reduce the risk of post-operative AF. Dr. Calo told this newspaper that although he had hypothesized that fish oil capsules and β -blockers might have an additive effect in this regard, this hy-

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'This is not the Holy Grail study, but we may have visited the scene of the crime.'

Dr. Sharon Perry, on evidence that gastroenteritis and vomiting may contribute to household transmission of *Helicobacter pylori*, p. 72 pothesis wasn't borne out. The subset of patients in the fish oil group who were also on a β -blocker proved to have the same 15% incidence of postoperative AF as those on omega-3 fatty acids only.

In a separate study, Dr. Biscione reported on 40 patients who had experienced significant morbidity due to paroxysmal AF episodes since receiving a dual-chamber pacemaker more than a year earlier. They were placed on 1 g/day of omega-3 fatty acids for 4 months, after which the fish oil

supplements were discontinued. Patients served as their own controls in this study, with investigators relying on the pacemakers' stored memory function to determine the impact of therapy.

In the 4 months prior to going on omega-3 fatty acids, patients were in a state of paroxysmal atrial arrhythmia 3.9% of the total time. They experienced a mean of 444 episodes. While on fish oil, however, they had only 181 episodes and spent 1.0% of their time in a state of atri-

al arrhythmia. This is evidence of a powerful treatment effect, declared Dr. Biscione of San Giocomo Hospital, Rome.

During the first 4 months after discontinuing omega-3 fatty acid therapy, the mean number of paroxysmal atrial arrhythmia episodes rebounded to 552. Patients spent 2.7% of that period in an atrial arrhythmic state.

As in Dr. Calo's study, there were no significant adverse effects associated with fish oil therapy.

