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Effect of Dietary Fish Oil on Atrial Fibrillation After Cardiac Surgery.

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Source

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Abstract

An open-label study reported that ingestion of a fish oil concentrate decreased the incidence of atrial fibrillation (AF) after coronary artery bypass grafting (CABG) surgery. However, a general cardiac surgery population involves valve and CABG surgeries. We undertook a double-blinded randomized controlled trial to examine the effectiveness of fish oil supplementation on the incidence of postsurgical AF after CABG and valve procedures. The primary end point was incidence of AF in the first 6 days after surgery. Two hundred patients were randomized to receive fish oil (providing 4.6 g/day of long-chain ω -3 **fatty acids**) or a control oil starting 3 weeks before surgery; 194 subjects completed the study, with 47 of 97 subjects in the control group and 36 of 97 subjects in the fish oil group developing AF (odds ratio 0.63, 95% confidence interval [CI] 0.35 to 1.11). There was a nonstatistically significant delay in time to onset of AF in the fish oil group (hazard ratio 0.66, 95% CI 0.43 to 1.01). There was a significant decrease in mean length of stay in the intensive care unit in the fish oil group (ratio of means 0.71, 95% CI 0.56 to 0.90). In conclusion, in a mixed cardiac surgery population, supplementation with dietary fish oil did not result in a significant decrease in the incidence of postsurgical AF. However, there was a significant decrease in time spent in the intensive care unit.