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Author has nothing to disclose with regard to commercial support.

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CHOICE OF SECOND PERICARDIAL DRAINAGE TUBE FOR POSTERIOR PLACEMENT

Reply to the Editor:

The letter from Demers and colleagues highlights a major question that still remains, namely whether effective pericardial space drainage with properly placed tubes that are kept patent will improve outcomes similar to the result achieved by Gozdek and colleagues.¹ It is reassuring that they have initiated a well-designed randomized trial to address this question such as I suggested my editorial. In their previous study referred to in the letter, they used a posterior Blake tube left in place for 5 days but had a high incidence of tube occlusion and did not see a benefit.² The other study that they quoted, by Sirch, and coworkers,³ used an active-clearance technique for the chest tube and found similar benefit to that seen in the study by Gozdek and colleagues,¹ but almost all those patients had only anterior mediastinal tubes placed. It is to be hoped that in the randomized trial proposed by Demers and colleagues they not only optimize chest tube patency but also choose a posterior pericardial tube, such as a soft rubber flat or oval tube with antithrombotic coating, that most surgeons would consider both harmless and effective when placed behind the heart.

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POSTERIOR PERICARDIAL DRAINAGE BY ANY MEANS MAY IMPROVE OUTCOMES AFTER CARDIAC SURGERY

Reply to the Editor:

We read with great interest the letter to the Editor by St-Onge and colleagues¹ on our recently published research article.² At the same time, we are glad that our findings have drawn the attention of international readership to the unmet need of adequate draining of the pericardial space after heart surgery procedures.

In brief, with a meta-analysis of 19 randomized controlled trials (RCTs) that enrolled 3425 patients, we assessed the efficacy and safety of posterior pericardial drainage, defined as posterior pericardiotomy incision, chest tube to posterior pericardium, or both compared with the control group that received no posterior pericardial drainage. Adequate drainage in the experimental group was associated with a significant 90% reduction of the odds of cardiac tamponade ($P < .001$) and 58% reduction of postoperative atrial fibrillation ($P < .001$). The odds of early and late pericardial effusion were significantly reduced: relative risks of 0.20 (95% confidence interval, 0.11-0.36; $P < .001$) and 0.05 (95% confidence interval, 0.02-0.10; $P < .001$), respectively. Reductions in postoperative complications translated into a significantly reduced odds of composite end point of death or cardiac arrest ($P = .03$), numerically lower odds of acute kidney injury ($P = .08$), and shorter length of hospital stay ($P < .001$).

The question raised by both Conti³ in an accompanying editorial and St-Onge and colleagues¹ is whether placement of a posterior intrapericardial drainage tube is as effective as the procedure of posterior pericardiotomy given the theoretic risk of procedural complications with the latter approach being vein graft compression, bleeding from the