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Reply to the Editor:

Thank you for the invitation to respond to Dr Casati and colleagues' letter. We used an in vitro bleeding time test (Platelet Function Analyzer [PFA]-100) to evaluate platelet function perioperatively at 7 different observation times. Only one of these observations was performed during cardiopulmonary bypass with hemodiluted patients. Fibrinolytic activity can indirectly be measured, evaluating the balance between the promoter of fibrinolysis (tissue-type plasminogen activator) and its inhibitor (plasminogen activator inhibitor 1). In our study[1] we observed that tissue-type plasminogen activator levels are not increased, whereas plasminogen activator inhibitor 1 and D-dimer levels are modestly increased after off-pump coronary artery bypass (OPCAB) surgery. These data would suggest that fibrinolysis is not particularly activated during OPCAB surgery. Dr Casati states that an antifibrinolytic agent should be used in patients undergoing OPCAB surgery because he has previously demonstrated[2] a significant reduction of postoperative bleeding in patients undergoing OPCAB treated with tranexamic acid (25 patients) compared with patients undergoing OPCAB treated with placebo (25 patients). In their study Casati and colleagues[2] were not able to show a significant difference in blood product transfusion between the groups. Moreover, hemoglobin and hematocrit values reported up to 24 hours postoperatively were not influenced by tranexamic acid administration. As we remarked in our article, recent studies with angiographic control have shown a worse graft patency in patients operated on by means of the OPCAB technique compared with those undergoing the on-pump technique. Inaccurate anastomosis rather than a procoagulative state is probably the main cause of these results; nevertheless, this has not been proved. Although numerous investigators have documented profound short-term and midterm coagulative-fibrinolytic and inflammatory alterations in patients undergoing coronary artery bypass grafting surgery, there are no clinical studies that evaluated prospectively and on an appropriate number of patients the value of prothrombotic and proinflammatory markers in predicting early graft occlusion. Existing studies are small and produced conflicting results: Poston and associates[3] reported that thrombelastography and whole blood aggregometry do not predict graft occlusion; however, in another study the same authors showed a reduction in platelet sensitivity to aspirin by means of both thrombelastography and aggregometry in patients with early graft failure.[4] Karski and coworkers[5] have recently demonstrated that tranexamic acid administration does not worsen early saphenous graft patency in patients receiving on-pump coronary artery bypass grafting. However, our results show that in the first 24 hours after the operation, patients undergoing on-pump operations and OPCAB have a different activation of the coagulation and fibrinolytic systems. Consequently, what is safe for patients undergoing on-pump operations might not be safe for those undergoing OPCAB. The reason why we operate on patients with coronary artery disease is to improve their long-term outcome while trying to minimize their perioperative risk. Considering that postoperative bleeding is not a serious complication after OPCAB surgery, we agree with Dr Casati's final remarks: "Further randomized studies, enrolling larger numbers of patients, are needed to confirm the antiinflammatory effects of TA and to rule out the potential risk of thrombotic complications."[2]

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A new surgical paradigm: Hybrid open and endovascular repair of the ascending aorta and aortic arch for acute type A dissection

To the Editor:

I read with interest the editorial by Dobrilovic and Elefteriades[1] reflecting on the potential future application of simultaneous hybrid endoluminal graft repair of the descending thoracic aorta after traditional open surgical repair of the ascending aorta and aortic arch for acute type A aortic dissection, as discussed in the article by Uchida and associates.[2]

Although the results reported by Uchida and associates[2] are noteworthy, stabilizing the true lumen in the descending thoracic aorta with an endoluminal graft after total aortic arch replacement may not be the final, or best, approach for acute type A aortic dissection. The current surgical paradigm is