different in patients with pre-CPB hematocrits of 30% as opposed to 40%. Another advantage of this approach is that it provided a means of objectively identifying a threshold for how low nadir hematocrits may be tolerated according to outcome data.

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Microfibrillar collagen hemostat in cardiac surgery

To the Editor:

The September 2003 article of Şırlak and associates¹ extolled the virtues of microfibrillar collagen (MC) as a hemostatic agent. Studies by our own group support the conclusion that this compound is highly effective in cardiac surgery.² However, I must sound more than a word of caution.

When in the early 1980s we have applied MC frequently in the course of heart operations, we encountered cases of unexplained brain injuries. Because we suspected MC as the culprit, the substance was subjected to extensive in vitro and in vivo investigation. We found that MC-containing shed blood, if returned to the circulation by either pump-suction or cell-salvage devices, may readily pass 40-mm pore-size filters and lodge in vital organs, including the brain.³

For this reason, we have recommended that blood contaminated by MC should not be reused. Once MC has been applied, only waste suction should be applied to handle shed blood.

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Reply to the Editor:

Despite the use of filters with a pore size of 20 µm, the combined use of intraoperative autotransfusion and microfibrillar collagen hemostats creates a potential risk for embolization.¹ It has been shown that this risk can be significantly reduced by use of appropriate currently available blood transfusion filters.² Despite this reduction, we share the concern of Dr Robicsek that this substance could pass through different blood-collecting circuits, which could lead to organ damage by either direct or induced embolization, even with the use of commercially available filters.³ For this reason we applied microfibrillar collagen after heparin was neutralized by protamine, and it was not reintroduced into the patient circulation. Moreover, as we stressed in the Methods section, shed mediastinal blood was not transfused into any patient.

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