In Reply.—We appreciate the comments by Drs. Hammer and Krane. Indeed, we believe that the pressurized infusion was the main cause of the localized arterial hypoxemia, because the high pressure reversed the normal arterial/venous pressure gradient, causing the transfusion to flow directly across the shunt. The shunting was so immediate and dramatic that we immediately suspected an anatomic shunt rather than retrograde flow through capillary beds. This was mentioned as a possible theoretical explanation for venoarterial admixture in general. The postoperative arteriography demonstrated the suspected abnormal anatomic venoarterial connection.

It is likely that all pediatric anesthesiologists believe that small distal veins should not be used for rapid transfusion. However, in this case, both peripheral lines were 18-gauge catheters. These are by no means small catheters, particularly in an 8.7-kg patient! Why were they placed so distally? Because these distal veins were much larger than the antecubital veins in this patient, possibly because of arterialization of the veins secondary to the anatomic shunts.

According to Poiseuille’s law, resistance to flow is affected by both radius and length of the catheter used. An 18-gauge, 3.2-cm catheter will allow much more rapid transfusion than an 18-gauge 8-cm catheter; in situations involving massive hemorrhage, this difference in flow can be critical.

We appreciate reiteration of the point that calcium chloride can be very irritating to small veins and tissues; when distal administration of calcium is considered, calcium gluconate is less damaging.

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Ethics for Non-emergencies

To the Editor.—I read with great interest the recent editorial by Pearson with its thoughtful and provocative analysis of the problems of obtaining informed consent when a potential subject’s condition precludes this action. Pearson correctly details the Food and Drug Administration’s criteria for exempting a clinical investigation from the requirement for obtaining informed consent. Although I agree with his analysis, I do not believe that the study that formed the basis for his editorial satisfied the requirements for “deferred consent” or came within the aegis of the Food and Drug Administration’s exemption.

I refer specifically to Pearson’s fourth prerequisite for permitting emergency research without a patient’s consent: “the investigation could not be performed without the waiver.” This stipulation implies that the condition being studied will be sudden and unanticipated and will mandate immediate action. The first sentence of the abstract in the article by Balser et al. clearly demonstrates that the pathology being investigated was neither sudden nor unanticipated. Rather, it was predictable and reasonably foreseeable: “Postoperative supraventricular tachycardia is a common complication of [cardiac] surgery.”

Accordingly, each patient should have been enrolled in this study before surgery, at which time informed consent easily could have been obtained in a nonemergent setting. Thereafter, if the arrhythmia developed in a patient who satisfied the other requirements for entrance into the randomization procedure, there would have been no ethical problems in conducting the investigation.

I am concerned that an unduly low threshold for waiving requirements for informed consent risks impairing the role of institutional review boards in the implementation of this important provision of federal regulations. This very well may result in imposing inflexible requirements for informed consent in a truly emergent setting, thereby interfering with the acquisition of important knowledge.

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In Reply:—We appreciate Dr. Cohen’s thoughtful remarks regarding consent in emergency procedures would like to offer a few clarifications in specific reference to our trial.

Dr. Cohen’s concern about the waiver of prospective consent focuses on the notion that the complication under treatment in our study (postoperative AF) was not “sudden (or) unanticipated.” Although postoperative supraventricular tachycardia is relatively common in cardiac and thoracic surgery patients (rates approach 40%), our study was directed mainly at a general surgical population in which the incidence is far lower. We estimate that less than 2% of the gastrointestinal/genitourinary surgery patients, who comprised our largest subgroup (table 1), developed postoperative atrial fibrillation. Although reasonable people might not agree on exactly what incidence satisfies the criterion for “unanticipated,” it would be necessary to interview thousands of patients preoperatively to obtain a worthwhile sample size under these conditions. We would also reaffirm that postoperative atrial arrhythmias do occur suddenly and, in our view, require immediate rate control intervention given the risk of myocardial ischemia with rapid heart rates.

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Plagiarism and Authorship

To the Editor—The recent example of wholesale plagiarism that graced the pages of the August 1998 issue of ANESTHESIOLOGY raises the question of academic honesty in addition to the shameful lifting by the junior author of 40% of the article from a review course lecture by Dr. Cottrell. In his editorial response that accompanied the authors’ retraction in the December 1998 issue, Editor-in-Chief Dr. Todd rightly decried the plagiarism. He then essentially exonerated the senior author, however, insisting that “one author may not be aware of plagiarism committed by a fellow author. In fact, it is extremely difficult for one author to defend himself from such actions committed by a fellow author.” Actually, it is very easy—do not put your name on someone else’s work!

The essence of plagiarism is the appropriation of the intellectual product of one person by another. How is this different from the granting or demanding of authorship by senior authors for the work product of their junior colleagues? In this case, the senior author, Dr. Kirsch, was asked to write an editorial. He delegated the task to a junior colleague, Dr. Bhardwaj, and then took equal authorship of the finished work product. Does it really matter that the work product he appropriated was actually that of Dr. Cottrell and not, as he thought, Dr. Bhardwaj?

The ubiquitous habit of senior authors taking credit for the work product of their junior colleagues is exactly equivalent to plagiarism. They are happy to steal (excuse me, share) the credit, but, of course, if there are later charges of intellectual hanky panky, they claim lack of knowledge or responsibility, and only the junior author takes the fall.

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