Anesthesia for Transjugular Intrahepatic Portosystemic Shunt Placement

To the Editor — We are interested to note Yonker Sell et al.'s comments on the role of the anesthesiologist during transjugular intrahepatic portosystemic shunt procedures, in their report of mortality during such a procedure under monitored anesthesia care.  They suggest that anesthesiologists should "...provide the necessary support should inadvertent complications occur." In contrast, 30 of the last 58 transjugular intrahepatic portosystemic shunt procedures that we performed through December 1995 were performed under general anesthesia, and we advocate increased anesthesiologist participation for this procedure.

Patients with hepatic failure and portal hypertension already have risk factors for aspiration of gastric contents, including ascites and esophageal varices (often with recent or active bleeding). In addition, airway access may be impeded after cannulation of the internal jugular vein and catheter and shunt placement is underway.

Securing of the airway electively with an endotracheal tube would also seem prudent, because emergency airway manipulation is more likely to cause hemorrhage in these patients with preexisting coagulopathies. Our current policy of general anesthesia was initiated after a patient, who required airway manipulation bled profusely from an atrumatic insertion of a nasopharyngeal airway. The trachea was intubated, with difficulty, over a radio-opaque guidewire (one of the advantages of being in the angiography suite!).

For these reasons, we believe that the anesthesiologist is better prepared to manage inadvertent complications with the airway already secured in an elective, atraumatic fashion, and with an anesthetized patient as opposed to techniques that involve conscious sedation.

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In Reply — We agree with the comments from Pivalizza et al. that patients with hepatic failure and portal hypertension are at risk for aspiration, and that airway management may be impaired with a procedure in the neck. However, Pivalizza et al. appear to imply that general anesthesia is better than conscious sedation and monitored anesthesia care for transjugular intrahepatic portosystemic shunt (TIPS) procedures. The overall complication rate for TIPS is low, with the majority of complications occurring after the procedure. The TIPS procedure is nonoperative. The extent of procedural pain is limited to the puncture wound in the neck and mild pain during dilation of the Wallstent device. The decision for a general anesthetic versus sedation and monitored anesthesia care for a TIPS procedure is made based on the mental status of the patient and the ability to tolerate the procedure without moving, as well as the overall hemodynamic status and ease of airway management. We believe that sedation and monitored anesthesia care is appropriate in select patients, and we would not suggest general anesthesia for all patients undergoing TIPS procedure. In reviewing the last 20 TIPS procedures done at our institution, 50% were done under general anesthesia and 50% were performed using conscious sedation. Two patients receiving conscious sedation were anesthetized during the course of the procedure because they were unable to remain still for the procedure.

Pivalizza et al.'s statement, "advocate increased anesthesiologist participation for this procedure," suggests that general anesthesia results...