

We agree that thorough and careful evaluation of an ultrasound is important to minimize potentially missing patients who are at risk for clinically significant vesicoureteral reflux. However, we maintain the opinion that a screening ultrasound cannot entirely exclude the possibility of meaningful vesicoureteral reflux. Based on our experience, we recommend continued close follow-up with repeat ultrasounds at a minimum, if a VCUg is not obtained.

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Re: Cicek et al.: Spinal Anesthesia Is an Efficient and Safe Anesthetic Method for Percutaneous Nephrolithotomy (Urology 2013;83:50-55)

The study that was published in your journal entitled "Spinal Anesthesia Is an Efficient and Safe Anesthetic Method for Percutaneous Nephrolithotomy", which is a retrospective study comparing the effects of general and spinal anesthesia on the efficacy and safety of percutaneous nephrolithotomy (PCNL) in about a 1000 patients, is an interesting study because of contributing to the literature and the urologists' daily practice. The authors stated that PCNL with spinal anesthesia has significant advantages over PCNL with general anesthesia, including shorter hospitalization, operation, and fluoroscopy time, lower analgesic requirement, and less frequent major complications ($P < .01$).¹ Also, the anesthesia method has no unfavorable effect to the performance of the operation because there is no difference between the 2 groups according to success rates.

The efficacy and safety of the epidural anesthesia in PCNL operations are also reported in previous studies.²⁻⁴ In addition, the regional anesthesia prevents the patient from the disadvantages of general anesthesia such as increased incidence of anaphylaxis because of multiple medication usage and more pulmonary, vascular, neurologic complications and problems associated with the endotracheal tube during the change of position from lithotomy to prone. However, PCNL with regional epidural anesthesia has some limitations. In case of massive hemorrhage because of vascular injury in PCNL operation, the surgeon has to convert to open surgery in lateral decubitus position immediately. When this major

complication occurs in the patient during the PCNL operation under regional epidural anesthesia, the surgeon has to tilt the patient initially to the supine position to let the anesthesiologist to insert an endotracheal tube and then to the lateral decubitus position. This situation causes a waste of time that might be life threatening for the patient. As a result, regional spinal anesthesia for PCNL might be a suitable alternative, especially for the patients who have risks for general anesthesia; however, the experience of the surgeon and the anesthesiologist is mandatory.

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Reply by the Authors

Percutaneous nephrolithotomy (PCNL) is worldwide used treatment modality for upper urinary tract stones. We investigated the impact of different anesthesia administrations in our retrospectively designed study. We presented that spinal anesthesia administration in PCNL had advantages as shorter durations of operation, fluoroscopy, and hospitalization, lower morbidity, and reduction of required blood transfusion and postoperative narcotic analgesics. We classified the complication in our patients according to Modified Clavien Classification. There were 3 (0.5%) patients with arteriovenous fistula, 5 (0.9%) patients with perirenal hematoma, and only 1 (0.2%) patient with nephrectomy in general anesthesia group. However, there were only 3 patients with perirenal hematoma in spinal anesthesia group. All patients with arteriovenous fistula and perirenal hematoma were treated with medical treatment and angioembolization. Only 1 patient underwent nephrectomy procedure because of the unsuccessful angioembolization 3 days after the PCNL.¹ There was no patient with adjacent organ injury in our study. None of the patients was needed to undergo additional procedure in perioperative period.