

## STONES

SUPINE VS PRONE  
PCNL: WHICH WINS?

Percutaneous nephrolithotomy (PCNL) is the first-choice management option for large renal stones or those that are refractory or not amenable to less-invasive procedures, such as shockwave lithotripsy or ureteroscopic techniques. Since its conception in the mid-1970s, PCNL has traditionally (and successfully) been performed with the patient in the prone position. However, this position can be problematic in patients who are obese or who have cardiopulmonary disease, and intraoperative repositioning is required in order to access the lower urinary tract. A technique that allowed PCNL to be performed on patients in the supine position was introduced in 1987, and has since been employed by increasing numbers of surgeons. The question of which is superior, however, is a continuing matter of debate. Liu *et al.* have now published a meta-analysis that compared the safety and efficacy of prone and supine PCNL.

Only four studies met the inclusion criteria for the meta-analysis: two single-center randomized controlled trials, and two case-control studies. A total of 389 patients were included in these trials, of whom 207 underwent prone PCNL and 182 underwent surgery in the supine position. Stone-free rates did not differ significantly between the prone and supine techniques (81.6% versus 83.5%), even in sensitivity analyses that excluded data from the case-control studies. Supine PCNL was associated with significantly shorter operative times compared to prone PCNL, although no differences were observed between the techniques in terms of complication rates, transfusion rates or fever rates.

The authors conclude that both techniques seem to be equally safe and effective. However, large, high-quality, multicenter randomized controlled trials will be required in order for a more robust conclusion to be made.

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