

Re: The efficacy and safety of ureteroscopy for ureteral calculi in pregnancy: our experience in 32 patients

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We read the retrospective study presenting the series on ureteroscopy (URS) using for urolithiasis in pregnant women with great interest [1]. Although many studies have published about the feasibility and safety of URS in pregnant women in recent years [2–5], this is the largest series. I applaud the authors for managing 32 pregnant patients who had obstructive symptoms related with ureter calculi (n : 27) and non-calculous conditions (n : 5).

Although the safety of URS for ureteral stones in pregnant patients is not significantly different from the safety of that procedure in non-pregnant patients [5], in fact it causes anxiety to the each of patient and surgeon. Perioperative anesthesia management of pregnant women during obstetric or non-obstetric surgery is more stressful than non-pregnant women because of maternal physiological changes during pregnancy, diseases specific for pregnancy and taking care of both pregnant and fetus [6].

Endoscopic procedures on pregnant women are performed with no fluoroscopic control to avoid the deleterious effects of radiation exposure on her and the fetus. All of the endoscopic procedures performed on pregnant without fluoroscopic imaging require advanced surgical skills, special care, and experience. The usage of inverted fluoroscope's

C-arm and thyroid collars to shield the uterus was previously reported to protect the fetus from the direct radiation exposure [7]. Ultrasonography (US) or Doppler US is the safest and X-ray free imaging modality used as guidance for the diagnosis of ureteral calculi or endoscopic treatment [8]. In the study, the authors have performed all procedures with direct visualization. No information is added if they felt any difficulty during the manipulations such as ureteral balloon dilation or Double-J stent or guide-wire insertion.

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