Supine percutaneous nephrolithotomy in late pregnancy
E. Holman¹, N. Bordás¹, M. Rákos²
¹ Department of Urology, Semmelweis Hospital, Kiskunhalas, Hungary
² Department of Obstetrics and Gynecology, Pándy K. Hospital, Gyula, Hungary

Introduction: Urolithiasis in pregnancy is a rare condition and almost always a conservative therapy is advised to be followed instead of extracorporeal shock wave lithotripsy (ESWL) or any kind of surgery. The aim of the authors was to report a special case of percutaneous nephrolithotomy (PCNL) in a pregnant woman performed in supine position.

Methods: A 35-year-old pregnant woman in her early third trimester (27th week of gestation) was operated on because of a 12 x 10 mm left pyeloureteric stone. Three months before surgery a Double-J (DJ) stent was inserted in another institute due to complete obstruction and severe complaints. The PCNL was indicated because of excessive stone formation on the DJ stent which made the change of it impossible, caused obstruction and severe renal colic. The procedure was performed in a supine semioblique position. Puncture of the calix was carried out under ultrasonic guidance. A lead apron was used to prevent the the fetus from direct X-ray exposure during the dilatation. Ultrasounic lithotripsy was used to desintegrate the stone before removal.

Results: PCNL in supine position was performed successfully in case of pregnancy of 27th weeks of gestation. The DJ and the stone were removed totally. No intraoperative or postoperative complications occured. Stone analysis showed struvite and carbonate apatite. Because. The woman delivered a healthy baby in the 39th weeks of gestation.

Conclusion: PCNL is a rarely indicated procedure in pregnancy, but in case of obstruction trying to avoid the fixation of nephrostomy drain for many weeks, PCNL can be safe and effective solution, provide much better quality of life and might be the definitive therapy of obstructing kidney stones. To our knowledge this is the first report in the literature about supine PCNL in pregnancy.

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