

The Clinical Courses of the Patients Who Chose SWL as the Initial Treatment Followed by Additional Procedures During 2007-2011 in Saitama Medical University

Introduction and Objective: The initial surgical treatment of urolithiasis is basically chosen purely based on medical indications. SWL is especially the choice for the patients with the stone in upper urinary tract who requests minimally invasive treatment. However, either doctor's preference or patient's request could affect decision-making, which may not lead to the best clinical course. Therefore further treatment after SWL failure should be carefully communicated to the patient. In this report, we investigated the clinical courses of cases who chose SWL as the initial treatment, retrospectively.

Materials and Methods: During these five years (2007-2011), 450 cases were treated in our department. There were 46 PNL, 365 TUL and 350 SWL done for these cases. Among these, 45 cases were treated, choosing SWL as the initial procedure, and then required further treatment.

Results: SWL is usually indicated for a stone in the upper urinary tract above pelvic bone in our department. Additional treatments were selected based on the result of stone fragmentation at least one month after initial treatment. Among these 45 cases, 29 cases had chosen SWL as the second procedure either based on the medical condition or patient's request. Of these 29 cases, stones in 10 cases had been successfully removed. Two cases had requested only SWL in spite of repeated procedures, but finally accepted other endourological procedures. One case experienced subcapsular hematoma after second SWL. TUL was selected for 16 cases as the second procedure. Of these 16 cases, stone treatments had been finished by the second procedure in 9 cases.

Conclusions: The result of SWL is often difficult to predict, although it is clearly less invasive and less affected by surgeon's skill than other procedures. Recklessly repeated SWL may lead to not only wasting time, but also difficult conditions for the next endourological procedure, such as severe adhesion of the stone to ureteral wall, migration of fragments into ureteral wall and so on. TUL has become a strong choice for the patients with upper ureteral stone. It has become safer and more effective because of new devices. We should inform patients of appropriate choices after SWL failure for those who selected SWL as the initial treatment.