

Early Experience in Laparoscopic Urology in Nepal

Introduction and Objectives: In the modern era, urologist has various modalities available to deal with urinary calculi and PUJ stenosis, namely shockwave lithotripsy, open or laparoscopic surgery. In developing countries like Nepal, people cannot afford procedures like ESWL. Laparoscopic urosurgery can be performed via transperitoneal and retroperitoneal approach. In our institution, retroperitoneal approach was preferred for using traditional laparoscopic instruments.

Materials and Method: It is a prospective Pioneer study conducted from April to November 2010, in which patients underwent retroperitoneal laparoscopic surgery for upper ureteric calculi, pelvis stone and PUJ stenosis at Kathmandu Medical College and Teaching Hospital. Patients with large upper ureteric calculi, Pelvic stone and PUJ stenosis and benign non-functioning kidney were selected for the study and were properly counseled for open or laparoscopic surgery. Those who opted for laparoscopic surgery were included in the study. We used 3 ports for laparoscopic ureterolithotomy (LUL) and four ports for pyelolithotomy, pyeloplasty and transperitoneal laparoscopic nephrectomy.

Results: A total of 36 surgeries were performed. Sixteen were LUL, 2 pyeloplasty and pyelolithotomy, 12 Fenger's pyeloplasty and 6 nephrectomies. There were 9 conversions, four for LUL, 3 for Nephrectomy and 2 for pyeloplasty. Majority of conversion were due to peritoneal breach, difficult anatomy during retroperitoneoscopy and 3 conversions in nephrectomy group were due to bleeding and difficult anatomy. Prolong urine leak and wound infection were the main complications. Drain removal and hospital stay were in the range of 4-11 days.

Conclusion: Laparoscopic urology is feasible and can be performed safely and effectively using traditional instruments.