of the PCNL procedure by doing a systematic sweeping of all the reachable pelvicalyceal system with rigid nephroscope, to remove all the clots, sand debris, and dust. This vacuuming method is the technique of choice for removing matrix stones. We had begun to use this technique since 1997, and we had used it in above 1000 PCNL without noting any complication related to the technique. **Conclusion:** This technique provides the greatest chances to have a "stone free" status, from even the fine sand debris. Can this technique lead to a lower stone recurrence rate by reducing the residual stone burden? Prospective studies are necessary.

VID-31

Percutaneous Renal Displacement Using the Needle Technique

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Introduction and objective: Due to the increased risk of intrathoracic complications, many authors have cautioned against a percutaneous approach above the 12th rib, and even discouraged it above the 11th rib. We present a video of our experience of percutaneous renal upper pole access using a percutaneous renal displacement technique, to render the superior calyx reachable below the 11th rib. We describe a renal displacement technique using an 18-gauge needle, and its use in different situations. **Material and Methods**: We present our technique of upper pole renal puncture, using percutaneous needle renal displacement technique, in high-located kidneys with various degree of difficulty. The needle renal displacement technique is performed under fluoroscopic guidance, with the X-ray beam perpendicular to the tract. Initially, a lower or middle calyx is punctured with an 18-gauge diamond-tipped needle. Then, a stiff shaft hydrophilic guidewire is inserted to protect urothelium from the needle-tip. The needle's proximal-end is progressively pushed in the cephalic direction, under continuous fluoroscopic monitoring. Consequently, the kidney is displaced caudally, by the lever manoeuvre. Secondly, the upper pole calyx is punctured, and tract formation is performed. **Results**: A caudal renal displacement, of many millimetres to few centimetres, is gained. There is also a slight inversion of the normal axis of the kidney. The renal upper pole becomes more accessible to puncture below the 11th rib or even the 12th rib, so decrease of intra-thoracic morbidity. Sometimes, if one displacement technique is not sufficient, 2 or even 3 displacements are performed. The displacement has always been possible in kidneys with no surgical history. However, it failed when the kidney had been fixed by post-surgical adhesions. This technique has also been used to immobilize mobile kidneys or to reorient complex and malrotated kidneys. **Conclusion**: Percutaneous needle renal displacement technique may render the superior calyx more available while avoiding or decreasing intra-thoracic complications, but are effective only when the kidney is mobile. This technique can be used to perform some calyx reorientation and to fix very mobile kidneys.

VID-32

Laparoscopic Anatrophic Nephrolithotomy for Complex Staghorn Calculi with Early Unclamping and Controlled Hypotension: An Attempt to Preserve Renal Function

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Introduction and Objectives: There are clear indications for the treatment of complex staghorn stones by Anatrophic Nephrolithotomy. When a reasonable number of sittings are unlikely to clear the calculus, b. other endourologic interventions have failed, c. an associated structural anomaly needs correction or d. percutaneous access is technically unfeasible, anatrophic nephrolithotomy is the recommended procedure. Laparoscopy offers a minimally invasive option to these patients. **Materials and Methods:** Laparoscopic anatrophic nephrolithotomy was performed in 8 patients with complex staghorn calculi. Mean patient age was 49 years (35-62), mean stone size was 53 mm (35-70). The principles of open anatrophic nephrolithotomy are followed. The hilum is dissected; the artery and vein isolated and controlled with bulldog clamps. An incision is made with a laparoscopic knife in the avascular plane along Brodel's line, approximately 1 cm from the lateral aspect of the kidney. The stone is extracted. The large vessels that are visualized are oversewn individually. Controlled Hypotension is applied minutes prior to hilum release. The clamps are removed within 20 minutes. Any additional bleeding vessels are oversewn. The blood pressure is gradually restored. As hemostasis is confirmed, the parenchyma is closed in a running fashion. **Results:** All patients were completed laparoscopically. Mean operative time was 142.5 min, mean warm ischemia time was 20.8 min. Average blood loss was 315 cc, mean average stay was 3.5 days. Complete clearance of the calculus was obtained in 5 patients. The 3 months' post-operative scan showed an average reduction of 6.6%, which returned to normal in the long-term follow-up. **Conclusions:** Our goal, besides removing the stone, is to preserve renal function. The technique has evolved achieving excellent hemostasis with an accurate incision along Brodel's line and early unclamping along with controlled hypotension, to reduce ischemia time. Advantages of this technique are that it diminishes ischemia time, ensures hemostasis prior to kidney closure and decreases the risk for arteriovenous fistula or aneurysm formation. We hope this technique leads to preservation of renal function in patients with staghorn calculi.

VID-33

RPLND in Post-Chemotherapy Residual Mass with 360 Degree Involvement of the Aorta: A Surgical Challenge

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Introduction and Objectives: Post-chemotherapy retro-peritoneal lymph node dissection in patients with non-seminomatous germ cell tumour of the testis is a formidable surgery. A 360 degree encasement of the aorta by the post-chemotherapy residual mass adds a major challenge to this procedure. In this video we demonstrate a technique of handling this complex problem. III **Material and Methods**: A 23-year-old man presented with big post-chemotherapy residual masses in the retro-peritoneum. His tumour markers had normalised. His CT abdomen revealed an 18x14x10cm mass having cystic and solid components. Superiorly the mass was reaching the superior mesenteric artery (SMA). The left renal vessels were completely encased. There was moderate left hydronephrosis. Further down the aorta was completely surrounded and lifted by the mass (360 degrees encasement). There were inter-aorto-caval, retro-caval, para-caval, right and left common iliac components of the mass. The patient was explored with left thoraco-abdominal incision. Supra-coeliac aorta was identified. Dissection was carried along its left border and then along the anterior surface. The origin of SMA was identified and kept safe. The dissection was shifted inferiorly to identify the left common iliac artery below the mass. The whole mass was lifted and slowly separated from the posterior abdominal wall till the left edge of the aorta.