Ipsilateral robot assisted laparoscopic ureteroureterostomy in an adult duplex collecting system

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Introduction: Duplex urinary collecting system is a common congenital anomaly in the paediatric population but rarely does it require intervention in an adult cohort. The superior moiety ureter is commonly associated with pathology. We describe an innovative technique of robot assisted laparoscopic ipsilateral ureteroureterostomy with side to side anastomosis.
Case: This is a case of a 26-year-old male who presented with an obstructing calculus in the mid superior moiety ureter in a duplicated collecting system. A sequalae of the obstruction led to a symptomatic stricture unresponsive to endoscopic interventions (including laser endoureterotomy).
Results: After retrograde insertion of ureteric stents and guidewires for intraoperative identification, the robot surgical system was docked. The duplicated collecting system was identified in its common sheath proximally. A side-to-side ipsilateral ureteroureterostomy was performed thus bypassing the stricture in the superior moiety ureter. Operative time was 140 mins and estimated blood loss 50 mls. There were no post-operative complications. The JJ stents were removed after 4 weeks. Follow up CT urography at **3 months** demonstrates excellent continuity and no residual hydronephrosis. The patients reports excellent symptomatic recovery.
Conclusion: This teaching video shows appropriate positioning and operative technique for a robot assisted side-to-side ureteroureterostomy. Our minimally invasive method is a feasible and safe approach to repair of a duplex collecting system with a symptomatic ectopic ureter.

Robotic-applied versus assistant applied clips in robotic assisted radical prostatectomy (RARP)-an analysis of efficacy, efficiency and cost

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Introduction: The performance of RARP is rendered somewhat challenging by the need for the bed-side surgical assistant to apply self-locking surgical clips. The daVinci Xi® system (Intuitive Surgical®, USA) allows application of clips under direct control of the console surgeon. This study aims to compare the efficacy, efficiency and cost-effectiveness of both techniques in RARP.
Methods: Twenty videos of RARP cases were divided into two groups; Group 1 being robotically applied and Group 2 being manually applied. Unique redistribution of operating instruments was utilized to maximize robotic clip application efficiency (which will be presented in the video). Review of all videos assesed number of successfully/dropped clips, and time for application of all clips. Costs were analysed. Statistical analysis was performed using student-t test.
Results: Mean number of clips used was 14 in Group 1 versus 10.9 in Group 2, $p < 0.05$. Mean number of clips dropped was 0.8/5.3% versus 2.3/21.9%, $p < 0.05$. Mean time for application was 16 minutes, 53 secs. versus 20 minutes 54 secs, $p > 0.1$. Average time per effective clip application was 73.2 seconds versus 119.6 seconds, $p < 0.05$. Cost analysis shows that an average of €686 was spent versus €490.50, $p < 0.05$.
Conclusions: Effective clip application is more efficient and quicker when performed robotically. Gross cost of robotic clip application is higher, due mainly to the greater number of clips used. This data has led to an immediate change in surgical practice, further increasing speed of application and reducing costs. Ongoing analysis of the data from this new scenario is being undertaken.

Antegrade total glans resurfacing for malignant and benign conditions of the penis; video demonstration of operative technique

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Introduction: Total glans resurfacing is a well-established operation for malignant, pre-malignant and benign lesions of the glans penis. The conventional technique utilises a retrograde approach to the removal of the glans skin and subcutaneous tissues, starting at the urethral meatus and working proximally in four quadrants. We present a video demonstration of the antegrade approach to glans resurfacing, beginning sub-coronally and working distally toward the urethral meatus.
Objective: To provide a video demonstration of the antegrade approach to total glans resurfacing of the penis.
Results: Antegrade total glans resurfacing begins in a similar manner to a standard circumcision. The entire glans skin is dissected off the penis in continuity with the foreskin, taking care not to cut too deep into erectile tissue, or get into a superficial plane and leave any disease behind. This produces a single intact specimen which is then orientated for the pathologist. The glans penis is resurfaced using a split thickness skin graft from the anterior aspect of the thigh. The graft is placed directly on to the defect without meshing, secured proximally and distally, and anchored in place with quilting sutures.
Discussion: The main advantage of this technique is the resultant single intact specimen produced. The single specimen can aid the pathologist in accurate histological analysis of the specimen, which is crucial in decision-making for the future management of each patient. This video demonstrates an operative technique which is achievable for genitourinary surgeons and which provides excellent oncologic, functional and aesthetic outcomes for patients.

Xi Robotic versus laparoscopic Anderson-Hynes pyeloplasty in adults: a single surgeon experience

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Introduction: Robotic reconstructive minimally invasive surgery is becoming very attractive option because of easier intra-corporeal suturing and shorter learning curve. Aim of this study is to compare a similar cohort of patient undergoing robotic and laparoscopic Anderson –Hynes pyeloplasty for pelvi-ureteric junction obstruction (PUJO) in adults and describe our technique step by step.
Methods: Patients undergoing Robotic assisted laparoscopic pyeloplasy (RALP) was compared with a similar cohort of patients who underwent laparocopic pyeloplasy (LP). A lateral trans-peritoneal approach was used in all cases. All anastomoses were stented antegrade. We describe our technique step by step in the video presentation. A diuretic renogram was obtained in all patients between three to six months after stent removal. Success was defined as a resolution of symptoms with non-obstructive outflow on the renogram. Data were collected from a prospectively maintained data base.