and a tension free reanastomosis can be performed. The following outcomes were evaluated: intra- and post- operative complications, short to medium term stricture recurrence, and presence of post-operative stress incontinence.
Results: The average operative time was three hours. No major intraoperative and postoperative complications occurred; no significant bleeding was recorded. Patients were discharged after 72 hours. At the time of catheter removal, 3 weeks after surgery, 7/12 patients developed stress urinary incontinence requiring 4 pads/day. Among those, four patients accepted the placement of an artificial sphincter for definitive post-operative incontinence, while one patient refused. Finally, 2 patients, both with a history of pelvic radiotherapy, developed a post-operative surgical site infection with a perineal abscess, that required surgical toilette and a salvage external urinary diversion. One patient developed stricture recurrence, treated with a Sachse procedure before the artificial sphincter could be placed. No patient reported significant postoperative pain and, beside the two patients who had surgical site infection, there were no significant wound problems. No patient reported fecal incontinence after surgery.
Discussion: Compared to the classic perineal access, a prerectal approach allows direct access to the posterior urethra, and the present experience demonstrates its advantage for the treatment of recurrent anastomotic strictures after radical prostatectomy. This technique ensures a good bladder neck mobilization and tension free anastomosis. Nonetheless, all patients need to be informed of post-operative urinary incontinence, which can be managed by artificial sphincter placement. Finally, a specific mention relates to patients with a history of pelvic radiotherapy, for the poor preoperative conditions of the tissues, making it very difficult to heal, therefore, these patients must be informed about the possibility of an external urinary diversion.

SC67 The effect of annual hospital volume on perioperative outcomes after urethroplasty

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Aim of the study: Urethroplasty represents a challenging procedure with high risk of intra- and postoperative complications even when is performed by expert hands (high-volume hospitals). Nevertheless, no study has previously assessed the risk of perioperative complications in relation to the annual hospital volume (AHV).
Materials and methods: In the Nationwide Inpatient Sample, we searched for patients who underwent urethroplasty (primary procedure code 58.4) between 2001 and 2015. Hospitals were categorized into empirically determined tertile, according to AHV of performed urethroplasties. Three groups were identified: low (<3 urethroplasties) volume centers (LVC), intermediate (3–19) volume centers (IVC) and high (>20) volume centers (HVC). We analyzed trends in urethroplasty procedures according to AHV. Multivariable logistic regression (MLR) examined the effect of AHV on intraoperative complications, post-operative complications and transfusion rate. Finally, nine sets of MLRs examined the effect of AHV on nine sub-types of post-operative complications such as gastrointestinal, vascular, neurologic, cardiac, respiratory, haematuria, urinary tract infections, sepsis and wound infections.
Results: We found a weighted estimate of 36773 patients underwent urethroplasty in the US. Of these, 13932 (34.9%) were operated in HVC, 15208 (38.1%) were operated in IVC and 10773 (27%) were operated in LVC. Within the study period, the rate of performed urethroplasties increased in LVC (EAPC: +6%, $p = 0.02$), remained stable in IVC (EAPC: −0.1%, $p = 0.9$) and decreased in HVC (EAPC: −3%, $p = 0.03$). Overall, 456 (1.1%) and 7517 (18.8%) patients respectively experienced intraoperative and post-operative complications, and 843 (2.1%) received transfusions. In MLR, IVC and LVC were associated with higher risk of intraoperative (IVC: Odds ratio [OR] 2.5, $p = 0.01$; LVC: OR 5.1, $p < 0.0001$) and post-operative (IVC: OR 1.2, $p = 0.03$; LVC: OR 1.7, $p < 0.001$) complications. Additionally, LVC was associated with higher risk of transfusions (OR 3.1, $p < 0.001$). Specific subsets of MLR models on post-operative complications showed that LVC was associated with higher risk of gastrointestinal (OR 2.5), cardiac (OR 3.9) and respiratory (OR 2.3) complications despite being adjusted for underlying comorbid illness, as well as of higher risk of haematuria (OR 3.6), urinary tract infections (OR 1.5) and sepsis (OR 2.7). Conversely, IVC was associated only with higher risk of cardiac complications (OR 1.9).
Discussion: This analysis presents a unique look at urethroplasty across the US in relation to AHV. We saw that approximately 65% of patients were operated in IVC and LVC. Moreover, there was a trend toward lower number of urethroplasty in HVC. Additionally, we found that the rates of intra and post-operative complications were considerably higher in LVC and IVC than in HVC. These data provide important indicators for policy makers to provide benchmarks for treatment and to categorize institution based on urethroplasty outcomes.