Ligation of Santorini plexus - Is it necessary step in endoscopic extraperitoneal radical prostatectomy (EERPE)?

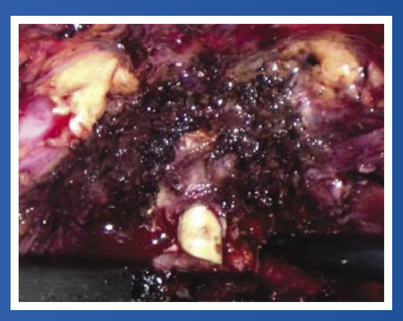
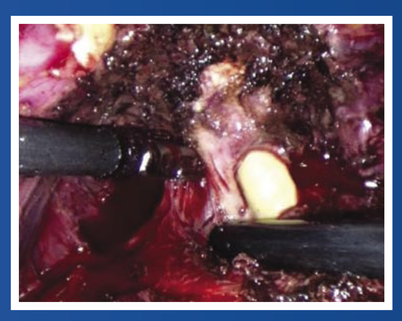
J. Kliment Jr., L. M.C.L. Fossion *

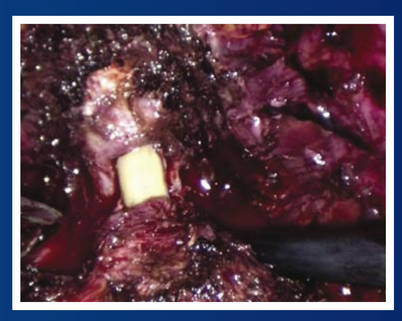
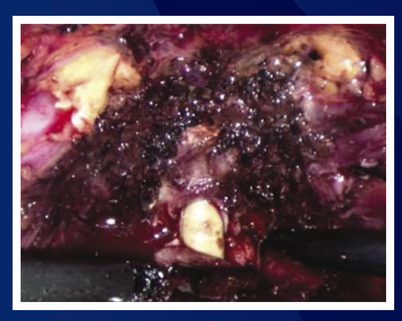
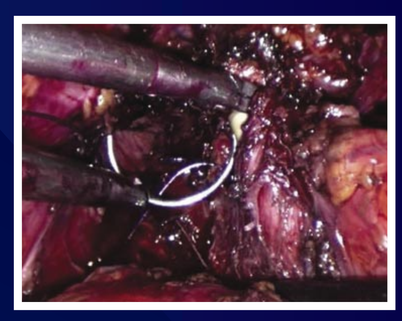
Department of Urology, Jessenius School of Medicine, Comenius University, Martin, Slovakia

*** Department of Urology, Maxima Medisch centrum, Veldhoven, The Netherlands**

Introduction and objectives:

EERPE has become a standard treatment option for localized prostate cancer in selected centres over the last decade. We report results of 145 cases of EERPE where we have performed deep dorsal venous plexus transsection without ligation. We evaluated feasibility of this modification of traditional technique.

Material and methods:

Between January 2006 and October 2009, 145 patients underwent EERPE for clinically localized prostate cancer. EERPE was performed in a descending fashion as described by Stolzenburg. Deep dorsal venous complex was selectively divided using bipolar or Ultracision forceps. We did not perform a suture ligation for the control of the Santorini plexus in any of the cases. One hundred and thirteen patients (78%) have also had extended pelvic lymph node dissection at the same time. Pathological stage, margin status, operating time, blood loss and complications were evaluated. All procedures were performed by the same surgeon (L. F.) and represent his learning curve.

Results:

Mean age of patients was 64 years (49-73), mean PSA was 11.2 ng/ml (1.1-64), all patients had clinically localized prostate cancer. Pathological stage was pT2 in 100 (69%) patients, pT3 in 40 (27.6%) patients and pTx in 5 (3,4%) patients. Overall positive margins (PM) were present in 44 (30 %) of patients. PM rates for pT2 and pT3 stages were 23% and 52% respectively. Mean operation time was 254 min (140-430), mean blood loss (BL) was 755ml (50-4000ml). Mean BL in first and last 50 cases was 977ml and 491ml respectively, the difference was statistically significant (P value < 0.05). Suture-less transsection of deep dorsal venous complex was not associated with excessive bleeding. There was no need for suture ligation of plexus or open conversions to control bleeding in any of the cases.

Conclusion:

We conclude that omitting ligation of Santorini plexus during EERPE is not associated with excessive bleeding and is a safe modification of well-established standard technique of EERPE. Results of our series are comparable to contemporary series.