

## **RETROGRADE EXTRAPERITONEAL LAPAROSCOPIC PROSTATECTOMY (R.E.L.P.): THE LYON TECHNIQUE – RESULTS IN 204 CASES**

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**INTRODUCTION AND OBJECTIVES:** Prospective functional and oncological evaluation of the R.E.L.P.

**METHODS:** From December 1999 to September 2003 we performed 204 R.E.L.P. in two private centers in Lyon\*(158) and Geneva°(46). With a single assistant, a 30° laparoscope and 4 operating ports, this procedure is conducted methodically according to six steps: balloon dissection of retropubic space, immediate or deferred pelvic lymphadenectomy, initial access to the erectile neurovascular bundles and the prostatourethral junction, section of the urethra and Denonvilliers' fascia with retrograde prostatorectal clivage up to seminal vesicles, antegrade vesicoprostatic dissection with section of the lateral prostatic pedicles, and vesico-urethral anastomosis.

Mean age: 65 years (46-76) Clinical stages: T1a-b=3.2% T1c=59.6% T2a=29.5% T2b=4.4% T3a=3.3%. Mean preop. PSA= 8.57 ng/ml (0.82-36.1) median=7.02ng/ml.

Mean PBP/patient=9.2 Mean positive PBP=3.2. Mean preop. Gleason score=6.43 (4=2.2%. 5=6.3%. 6=43.6%. 7=42.5%. 8=4.9%. 9=0.5%). Capsular infiltration=6.7%.

**RESULTS:** Conversion rate was: 2% (4/204). Mean operative time is 210 min: 135-360 (including 3 learning curve). Mean time: Exposure =20mn, Prostatectomy=136mn, Anastomosis=44mn. Median specimen weight= 41.4 gm (14-137).

Gleason score=6.62 (4=0 5=4.8% 6=28.3% 7=57.6% 8=8.8% 9=0.5%)

Histopathological stages: pT2=71% (pT2a=19.6% pT2b=51.4% pT3a=17% pT3b=8.6% pT4=3.3% . Global positive margins=26.9% (apex=57%) Positive margins in pT2=12.5%. Nx=57.4% N0=41% N+=1.6%.

Mean catheter removal =3.2 days and mean hospital stay=4.3 days.

Complications: Perop.=2 rectal lesions, 1 ureteral kinking. Postop.=3 anastomotic leakage, 5 pelvic hematoma, 4 anastomosis sclerosis, 9 urethral stenosis.

Continence at 3months: No pad= 88.5% (immediate:45%. after few days:62.7%. after few weeks:70.4%). One pad per day=9.6%. More than one pad/day=2.9%. At 1 year; no pad:93.5% Preop. erectile dysfunction: 34.5%. At 1 year: possible intercourse=53%. Spontaneous=32.5% Assisted intercourse=20.5%. Postop. impotence=47%.

PSA postop. after 3 months: ≤0.1=88% > 0.1<0.8 =9.3% >0.8= 2.7%.

PSA after 1 year ≤0.1=93.9% >0.1<0.8=5.1% >0.8=1%(RXT or Hormon.)

Adjuvant radiotherapy=19.5%.

**CONCLUSIONS:** RELP appears to be the method of choice for appropriate management of localized prostate cancer. This logical, safe and efficient technique reproduces more precisely the open operation, while keeping the same landmarks. The initial approach with primary dissection of the neurovascular bundles and prostatic apex improve obviously first continence then potency while oncological results still have to progress.