between pre-eSRT PSA level and BCR-free survival rate at 5 years after eSRT according to cancer characteristics at RP. Results: Median follow-up after eSRT was 47 months. The 5year BCR-free survival rate was 81%. At multivariable analysis, pre-eSRT PSA level was associated with BCR after eSRT (hazard ratio (HR)=4.89; p<0.0001). Moreover, pathologic stage  $\geq$ pT3b (HR=2.07; p=0.007), pathologic Gleason score  $\geq 8$  (HR=2.69; p=0.0002) and negative surgical margins (HR=2.50; p<0.0001) were associated with BCR and were identified as risk factors. Overall, using lowess methods, we observed a decrease of 5-year BCR-free survival rate from 87% to 75% for pre-eSRT PSA level ranging from 0.1ng/ml to 0.5 ng/ml. Overall, the 5-year BCR risk increased by 3% per 0.1 ng/ml of PSA level. However, when patients were stratified according to the number of risk factors ( $\leq 1 \text{ vs.} \geq 2$ ), the effect of increasing PSA at eSRT on cancer control was higher in men with more aggressive disease. Specifically, patients with ≥2 pathologic risk factors showed a 5-year increased risk of BCR equal to 10% per 0.1 ng/ml of PSA level vs. 1.5% in patients with a single risk factor (p<0.001). Conclusion: Cancer control after eSRT depends on

pretreatment PSA level. This effect is highest in men with, at least, two of the following features: pT3b/pT4 disease, pathologic Gleason score ≥8 and negative surgical margins. In these patients, eSRT should be administered at the very first sign of PSA increase in order to maximize cancer control.

## 115 ROBOT-ASSISTED LAPAROSCOPIC VESICULECTOMY FOR LARGE SEMINAL VESICLE CYSTOADENOMA: A CASE REPORT AND REVIEW OF THE LITERATURE

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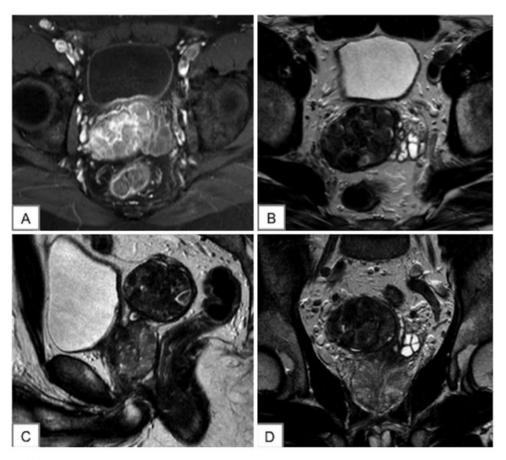


Figure 1. (Abstract 115).

Table I. Strategies for diagnosis and types of surgical approach for seminal vesicle cystoadenoma according to the published series. TRUS, transrectal ultrasound; CT, computed tomography; MRI, magnetic resonance imaging; CYS, cystoscopy; FNA, fine needle aspiration; Abd US, abdominal ultrasound, RALV, robot-assisted laparoscopic vesiculectomy.

Study	Patient's age (years)	Tumor size (greatest diameter) (cm)	Diagnostic strategy	Surgical procedure	Perioperative I complication Y=present, N=absent	Cocal recurrence, Y=present, N=absent (years after surgery)
Soule <i>et al.</i> Proc Staff Meet Mayo Clin., 1951.	47	14		Open (Conservative)	N	N
Damjanov et al. J Urol., 1974.	52	5.5	Autopsy	(Conscivative)	N	N
Lundhus et al. Scand J Urol Nephrol., 1984.	39	7.4		Open (Cysto-prostato- vesiculectomy)	N	N
Mazur et al. Am Jour of Surg Path 1987.	49	7		Open (Conservative)	N	Y (2)
Bullock <i>et al.</i> JR Soc Med., 1988. Raghuveer <i>et al.</i> Indian J Pathol Microbiol., 1989.	59	12		LV	N	Y (3)
Mazzucchelli et al. J Urol., 1992.	63	3		Open (Conservative)	N	N
Ranschaert <i>et al.</i> J Belge Radiol., 1992.	50	12		Open (Conservative)	N	N
Lagalla et al. Abdom Imaging 1993.	33		TRUS, CT, FNA - Cytology, Biopsy	Open (Conservative)	N	N
Santos et al Pathology., 2001.	49	15	3 237 1 3	Open (Conservative)	N	N
Gil et al International Braz J Urol., 2003.	49	7	Abd US, CT, MRI	Open (Conservative, retrovesicle approach)	N	N
Lee et al. Intern Jour of Urol., 2006.	46	7.5	CT, MRI, Explorative Laparotomy	Open (Conservative)	N	N
Lorber et al Eur Urol., 2011.	52	14	CT, MRI, Abd US, Biopsy	Open (Conservative, transvesicle)	N	N
Kural et al. Journ of Endourol., 2011.	48	6	TRUS, Biopsy	RALV	N	N
Ploumidis <i>et al</i> . Intern Jour of Surg Case Reports 2012.	45	17.2	TRUS, CT, MRI, CYS, FNA-Cytology, Intra- operative Biopsy	RALV	N	N
Arora et al. Urology 2013.	23		TRUS, MRI	Open (Conservative)	N	N
Zhu <i>et al</i> . Asian Journ of Andrology 2013.	31	5	CT, MRI	LV	N	N
Zhang et al. Urology 2013.	32	5		LV	N	N
Zhang et al. Urology 2013.	64	4.5		LV	N	N
Zhang et al. Urology 2013.	50	3.8		LV	N	N

Case Report: A 47-year-old patient was referred to our centre for gross hematuria, mild dysuria and other lower urinary tract symptoms (LUTS). Past medical history was unremarkable and no co-morbidities were present. Digital rectal examination (DRE) revealed, cranially to the prostate, a tense-elastic mass with undefined upper and lateral boundaries. Prostate-specific antigen (PSA) level was 1.7 ng/ml. Physical examination and

laboratory tests were otherwise normal. Trans-abdominal ultrasound showed no lesions or abnormalities in the upper urinary tract; high-resolution trans-rectal ultrasound (TRUS) confirmed the presence of a multisepted, solid-cystic pelvic mass occupying the retrovesicle space. An office cystoscopy showed no lesions within the bladder. Pelvic magnetic resonance imaging (MRI) confirmed the presence of a retrovesicle, 6.0×4.5

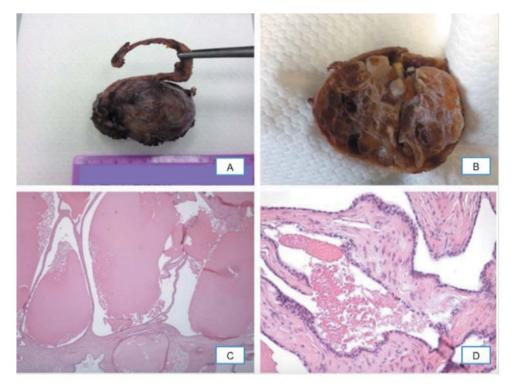


Figure 2. (Abstract 115).

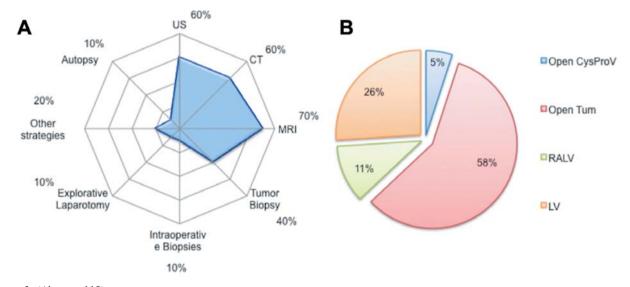


Figure 3. (Abstract 115).

cm well-defined pseudo-nodular mass, arising from the right seminal vesicle (SV) and vas deferens (VD) (Figure 1).

TRUS-guided prostatic and SVs biopsies showed no neoplastic proliferation in all the samples from both the prostate and the mass. The patient was then scheduled for robot-assisted laparoscopic vesiculectomy (RALV). After a transversal incision of the peritoneum at the level of the

Douglas pouch, a voluminous mass, firmly adherent to the surrounding tissues, was found. The plane between the mass, the rectum and the bladder was carefully developed until the tumor was completely released from the surrounding adhesions. The left VD and SV were preserved during the dissection. The neuro-vascular bundles (NVBs) were approached bilaterally in an athermal, traction-free manner in

order to preserve continence and potency. The specimen was then removed intact through the camera port by using a retrieval bag. Accurate hemostatic control was achieved and a tube drain was positioned. Console time and estimated blood loss were, respectively, 120 minutes and 50 cc; no intraoperative complications were recorded. The post-operative course was uneventful and the patient was discharged on the fourth postoperative day with normal blood tests and spontaneous voiding. A two-year follow-up showed no evidence of disease recurrence. At present, the patient is free of symptoms with full preservation of continence and potency. Histopathological examination revealed a 7.0×4.5×4.5 cm cystic SV cystoadenoma (Figure 2).

No significant cytologic atypia, mitotic activity or necrosis were present. The proliferation index was <1%. Review of the Literature: A systematic review of the English-language literature was performed using the Medline, Embase and Web of Science databases up to December 2014. Twenty case reports have been published in literature on SV cystoadenoma (Table I).

Median patient age and median tumor diameter were 49 years (inter-quartile range (IQR)=42-51) and 7.0 cm (IQR 5.0-12.0), respectively. No perioperative complications were reported in all the published series. Local recurrence occurred in 2 cases (10%) after 2 and 3 years, respectively. The differential use of diagnostic investigations and surgical approaches for SV cystoadenoma in the published series is shown in Figure 3. *Discussion and Conclusion:* Primary tumors of SVs are very rare and the differential diagnosis must be based on a multimodality approach. Most cases of SV cystoadenoma were managed with open surgery through transvesicle/retrovesicle approaches or radical cysto-prostatovesiculectomy. To date, minimally-invasive seminal vesiculectomy (MISV) is increasingly used for the treatment of beginning diseases of SVs achieving optimal oncologic

and functional results. Therefore, they could be considered the new gold standard for the treatment of such rare diseases.

## 116 CURRENT STRATEGIES FOR DIAGNOSIS AND TREATMENT OF BENIGN TUMORS OF SEMINAL VESICLES: A SYSTEMATIC REVIEW OF THE LITERATURE

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Introduction/Aim: Benign tumors (BT) of seminal vesicles (SV) are very rare. Diagnosis could be challenging and often requires the histopathological analysis after surgical excision. The best surgical treatment is still matter of discussion. The aim of this review is to analyze the current strategies for diagnosis and treatment of such tumors. Materials and Methods: A systematic review of English literature was performed using the Medline, Embase and Web of Science databases up to October 2014. Use of diagnostic investigations, options of surgical management, perioperative complications rate and oncologic outcomes were analyzed for each tumor histotype. Results: Fifty-eight case reports have been published in literature on BTs of SVs (Table I). Of these, 5 were excluded from the analysis due to lack of data. Cystoadenoma was found in 20 cases (38%), leiomyoma in 10 (19%), schwannoma in 8 (15%), mixed epithelial-stromal tumor in 5 (9%), phyllodes tumor in 4 (8%) and other BTs in 6 (11%) (Figure 1). Median patient age and median tumor diameter were 50 years (range=23-79) and 5.0 cm (range=2.0-29.0),

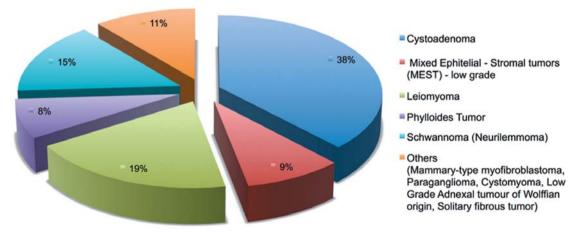


Figure 1. (Abstract 116).