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),

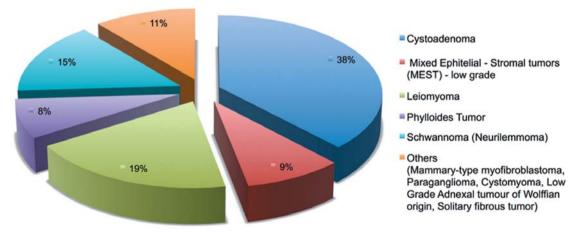


Figure 1. (Abstract 116).

Table I. Overview of the 53 published series on benign tumors of seminal vesicles included in the analysis.

Histopathological definition (according to the study)	Number of studies n (%)	Patients' age (years), median (range)	Tumor size (greatest diameter) (cm), median (range)	Number of studies with a precise definition of the diagnostic strategy n (%)	Number of studies with a precise definition of the therapeutic strategy n (%)
Cystoadenoma	20 (38)	49 (23-64)	7.0 (3.0-17.2)	10 (50)	19 (95)
Mixed epithelial -					
stromal tumors (MEST) -					
low grade	5 (9)	61 (37-70)	6.5 (2.5-29.0)	4 (80)	5 (100)
Leiomyoma	10 (19)	61 (37-74)	5.0 (2.0-14.5)	7 (70)	9 (90)
Phyllodes Tumor	4 (8)	43 (39-59)	7.6 (5.5-14.5)	3 (75)	4 (100)
Schwannoma (Neurilemmoma)	8 (15)	45 (31-79)	3.0 (2.2-7.0)	5 (63)	8 (100)
Others (mammary-type myofibroblastoma, paraganglioma, cystomyoma, low-grade adnexal tumour of Wollfian origin, solitary fibrous tumor)	6 (11)	55 (29-79)	5.8 (2.0-14.0)	5 (83)	6 (100)
All tumors	53 (100)	50 (23-79)	5.5 (2. 0-29.0)	34 (64)	51 (96)

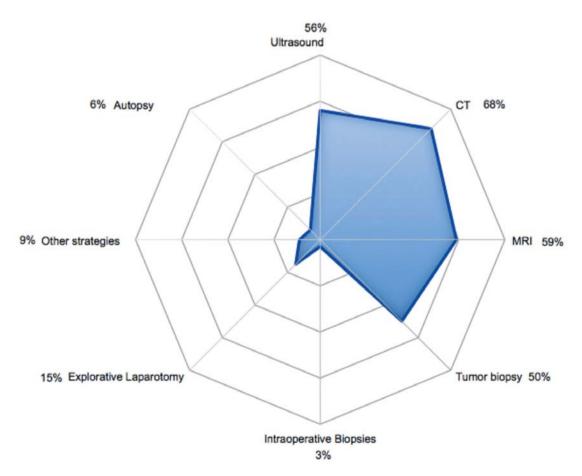


Figure 2. (Abstract 116).

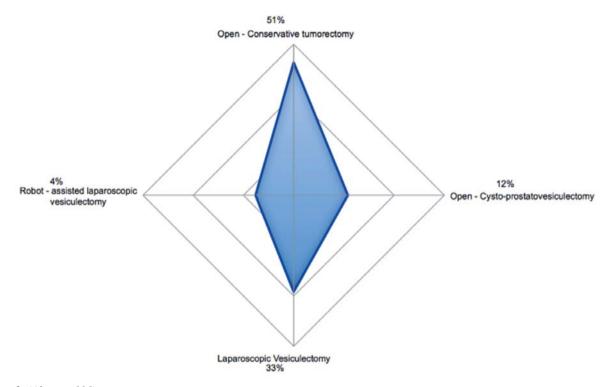


Figure 3. (Abstract 116).

Table II. Use of diagnostic investigations in the published literature on benign tumors of seminal vesicles.

Histopathological Definition (according to the study)	Ultrasound (TRUS +/- Abd US), n (%)	CT n (%)	MRI n (%)	Tumor biopsy n (%)	Intraoperative biopsies n (%)	Explorative laparotomy n (%)	Other strategies (Cystoscopy, FNA - Cystology, IV Urography, etc.), n (%)	Autopsy n (%)
Cistoadenoma Mixed ephitelial - stromal tumors	6 (60)	6 (60)	7 (70)	4 (40)	1 (10)	1 (10)	2 (20)	1 (10)
(MEST) low-grade	1 (25)	4 (100)	2 (50)	3 (75)	0 (0)	1 (25)	1 (25)	0 (0)
Leiomyoma	3 (43)	4 (57)	4 (57)	2 (29)	0(0)	1 (15)	0 (0)	1 (15)
Phylloides tumors	2 (67)	2 (67)	2 (67)	1 (33)	0 (0)	1 (33)	0 (0)	0 (0)
Schwannoma (neurilemmoma)	5 (100)	4 (80)	3 (60)	4 (80)	0 (0)	0 (0)	0 (0)	0 (0)
Others (mammary- type myofibroblastoma, paraganglioma, cystomyoma, low-grade adnexal tumour of Wolffian origin, solitary fibrous tumor)	2 (40)	3 (60)	2 (40)	3 (60)	0 (0)	1 (20)	0 (0)	0 (0)
All tumors	19 (56)	23 (68)	20 (59)	17 (50)	1 (3)	5 (15)	3 (9)	2 (6)

Numbers and percentages are referred to those studies where a precise definition of the diagnostic work-up was clearly stated (see Table I). TRUS, transrectal ultrasound; CT, computed tomography; MRI, magnetic resonance imaging; CYS, cystoscopy; FNA, fine needle aspiration; Abd US, abdominal ultrasound.

Table III. Use of different surgical treatments in the published literature on benign tumors of seminal vesicles. Numbers and percentages are referred to those studies where a precise definition of the surgical technique was clearly stated (see Table I).

Histopathological definition (according to the study)	Open - Conservative tumorectomy (with different approaches) n (%)	Open - Cysto- prostato- vesiculectomy n (%)	Laparoscopic vesiculectomy (LV) n (%)	Robot- assisted laparoscopic vesiculectomy (RALV) n (%)	Perioperative complications (Y=any complication reported; N=no complications reported)	Local recurrence n (%)
Cistoadenoma	11 (58)	1 (5)	5 (26)	2 (11)	N	2 (10)
Mixed ephitelial -						
stromal tumors	2 (10)	• (40)	4 (00)	0. (0)		0 (0)
(MEST) low grade	2 (40)	2 (40)	1 (20)	0 (0)	N	0 (0)
Leiomyoma	5 (55)	1 (11)	3 (33)	0 (0)	N	0 (0)
Phylloides tumors	2 (50)	0 (0)	2 (50)	0 (0)	N	0 (0)
Schwannoma (neurilemmoma)	2 (25)	1 (13)	5 (63)	0 (0)	N	0 (0)
Others (mammary-type myofibroblastoma, paraganglioma, cystomyoma, low-grade adnexal	4 (67)	1 (17)	1 (17)	0 (0)	N	1 (17)
tumour of Wolffian origin, solitary fibrous tumor)						
All tumors	26 (51)	6 (12)	17 (33)	2 (4)	N	3 (6)

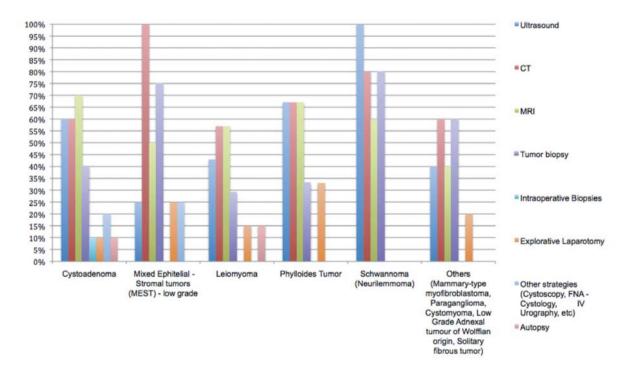


Figure 4. (Abstract 116).

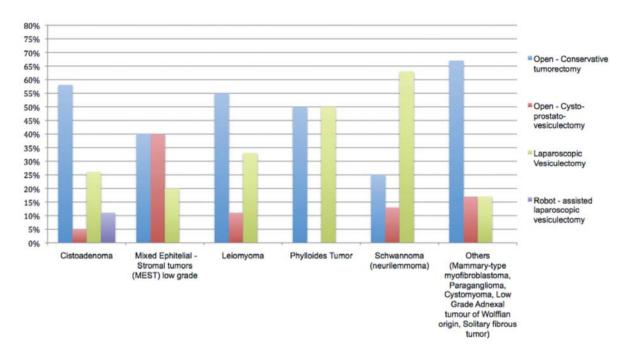


Figure 5. (Abstract 116).

respectively. In 34 papers (64%), the diagnostic work-up was accurately described (Table II, Figure 2). In these studies, ultrasound (US) was used in 19 cases (56%), CT scan in 23 (68%), endorectal MRI in 20 (59%), preoperative biopsy in 17 (50%) and intraoperative biopsy in 1 case (3%). Explorative laparotomy was carried out in 5 cases (15%), while cystoscopy and other modalities in 3 (9%); finally, 2 cases (6%) were found at the time of autopsy. In 51 studies (96%), the surgical technique was well defined (Table III, Figure 3). An open approach was used in most cases, with conservative tumorectomy in 26 cases (51%) and radical cysto-prostatovesiculectomy in 6 (12%). Laparoscopic and robotic seminal vesiculectomy (SVe) were performed in 17 (33%) and 2 (4 %) cases, respectively. Differential use of diagnostic modalities and surgical techniques for each tumor histotype is presented in Figures 4 and 5, respectively. No perioperative complications were reported in the published series. Local recurrence occurred in 3 cases (6%). Nonetheless, the period of follow-up was highly variable among the studies. Discussion and Conclusion: The first priority during the diagnostic assessment of a SVs neoplasm is to rule out primary or secondary malignancies. The overall preoperative evaluation is critical to choose the most appropriate surgical treatment. MRI and preoperative biopsy are fundamental in the diagnostic work-up in order to define the anatomic relationships of the tumor and characterize its nature. MRI accurately defines the anatomic relationships of the tumor, while biopsy the characterization of its nature and, consequently, the more appropriate surgical strategy. SVe is the recommended treatment for solid masses that are benign on biopsy, if symptomatic. Although most cases in the literature were managed with open surgery, nowadays, laparoscopic or robotic SVe should be considered the gold standard treatment since they combine a minimally-invasive approach with excellent oncologic outcomes. Nonethless, the overall grade of recommendation is currently low as the evidence is still based on case reports and sporadic case series.

## 117 LARGE PELVIC GOSSYPIBOMA DIAGNOSED AT THE TIME OF RADICAL PROSTATECTOMY 30 YEARS AFTER INGUINAL HERNIOPLASTY

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Case Report: A 71-year-old man was referred to our centre for obstructive lower urinary tract symptoms (LUTS) and history of a vague, chronic discomfort in the right groin and testis since many years. Prostate-specific antigen (PSA) level was 12 ng/dl. The diagnostic work up revealed a Gleason score 4+4=8 adenocarcinoma of the prostate. No bone metastases were