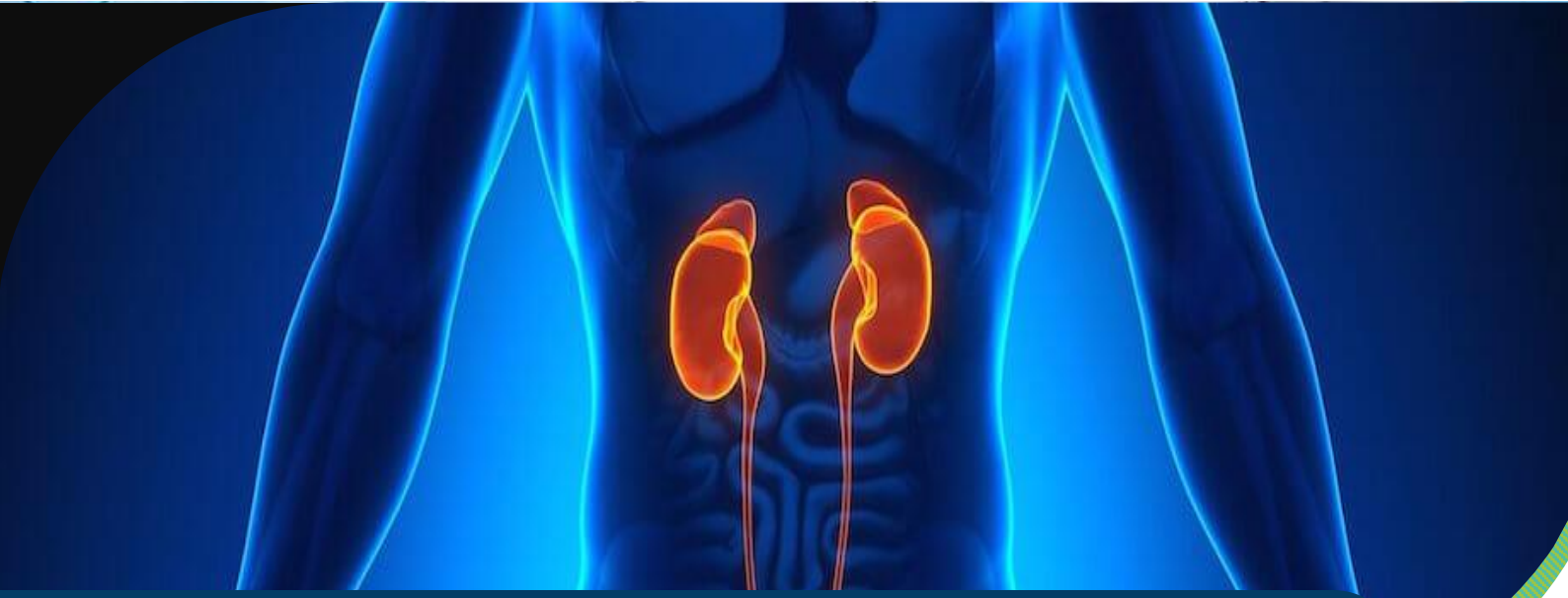

NU Rounds

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Dear Doctor,

Greetings from Micro Labs limited. We are happy to bring you "**NU Rounds**" which contains latest and interesting news in the field of Urology.

Inside This Issue:

Should you require any specific article or medical information, please feel free to contact us at medicalservices@microlabs.in

Looking forward to your valuable feedback

Best Regards,

Medical Team, Micro Labs Ltd

Radiotherapy during COVID-19 for Prostate Cancer

A framework for managing radiotherapy for prostate cancer patients during the coronavirus disease 2019 (COVID-19) pandemic is laid out in a special article published online in Advances in Radiation Oncology. Nicholas G. Zaorsky, MD of the Penn State Cancer Center in Hershey, and colleagues made suggestions and established a system for remote visits and the prevention, deferment, and shortening of radiotherapy (RADS) to diagnose and treat patients with prostate cancer during the COVID-19 pandemic.

The researchers indicated that telemedicine appointments and repeat trips are required where services and staff are accessible at all phases of prostate cancer. Delays in treatment and return visits between 1 and 6 months is deemed healthy depending on the level of the illness.

Treatment can be avoided or delayed until safe in the case of very low, low and favorable intermediate-risk disease. Neoadjuvant hormone therapy can be used for intermediate-risk, high-risk, clinical node-positive, post-chirurgical recurrence, oligometastatic, and low-volume M1 disease for 4 to 6 months, when required.

Ultrahypofractionation is favoured for clustered, oligometastatic, and low-volume M1 disease; mild hypofractionation is preferable for postprostatectomy and clinically node-positive disease. Salvation is preferable over adjuvant radiation.

The author says that these recommendations are not formal rules or policies, as we do not believe that this is possible when data is so limited, but rather the goal was to provide guidance and a framework for thinking about how numerous programs approach the care of patients with prostate cancer in their own clinics, all of whom are at different stages of impact and COVID-19 global pandemic restrictions

Submucosal injection of triamcinolone acetonide in the treatment of type II/III interstitial cystitis/bladder pain syndrome

INTRODUCTION

A neurological condition with an unknown origin is interstitial cystitis / bladder pressure condition (IC / BPS). Throughout the suprapubic region it primarily presents as pressure or irritation with bladder overflowing, which can be alleviated with urination.

IC / BPS is frequently followed by regular urination, nocturia and anxiety and is more prevalent in middle-aged people. IC / BPS significantly impacts patient's quality of life. The etiology and pathophysiology of this condition have yet to be thoroughly known, and clinical practice still lacks readily accessible and successful treatment methods. The objective of the study is to determine the efficacy of triamcinolone acetonide submucosal injection in managing interstitial cystitis / bladder pain syndrome type II / III.

METHODS

A retrospective analysis of the clinical data of type II/III interstitial cystitis/bladder pain syndrome patients and changes in International Prostate Symptom Scores and the Pelvic Pain and Urgency/Frequency symptom scale after surgery were evaluated to explore factors that may affect patient outcomes.

RESULTS

A total of 27 female patients and 8 male patients were enrolled, with type II patients accounting for 62.9% of the sample, and the median follow-up duration was 31 months (range: 12–40 months). Twenty-two patients (74.3%) had significantly improved questionnaire scores at 4 weeks postoperatively. Treatment efficacy was sustained for at least 1 year in 15 patients, and persistent effectiveness was noted in 10 (28.6%) patients. Patients with an advanced age ($p = 0.015$), high pain scores ($p = 0.040$), and higher International Prostate Symptom Scores ($p = 0.037$) and Pelvic Pain and Urgency/Frequency symptom scale scores ($p = 0.020$) were more likely to benefit from submucosal

injection of triamcinolone acetonide. Gender, disease duration, and the presence of Hunner's lesions had no predictive value for treatment outcomes.

Question		Pre-procedure Score Mean (SD)	Post-procedure Score Mean (SD)	*p*-value
IPSS	Incomplete Emptying	4.5 (0.7)	2.1 (1.3)	< 0.0001
	Frequency	4.5 (0.7)	2.1 (1.5)	
	Intermittenc	2.1 (2.0)	0.9 (1.2)	
	Urgency	4.4 (0.6)	1.8 (1.4)	
	Weak Stream	2.2 (1.9)	1.0 (1.1)	
	Nocturia	3.7 (0.7)	2.3 (1.0)	
	QOL	5.7 (0.5)	2.1 (2.0)	
	Total Score	31.4 (5.5)	14.2 (9.1)	
PUF	Daytime Voids	3.0 (1.0)	1.0 (1.0)	
	Nighttime Voids	3.7 (0.7)	2.3 (1.0)	
	Pain in Bladder, Pelvis	2.3 (0.9)	0.9 (0.6)	
	Pain Scale	2.1 (0.8)	0.8 (0.7)	
	Urgency after Voiding	2.2 (0.8)	0.9 (0.9)	
	Urgency Scale	2.4 (0.7)	0.8 (1.0)	
	Total Bother Score	7.5 (1.8)	3.0 (3.5)	
	Total Symptom Score	16.6 (3.3)	7.7 (4.9)	
	Total PUF Score	24.1 (4.8)	10.7 (8.1)	

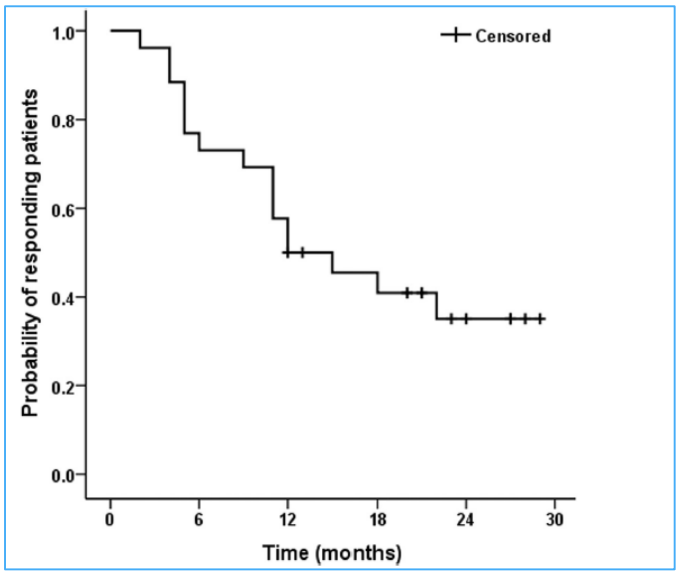
SD Standard deviation, *IPSS* International Prostate Symptom Score, *PUF* Pelvic Pain and Urgency/Frequency, *QOL* Quality of life

Mean pre-procedure and post-procedure scores for individual questionnaire items and Wilcoxon rank-sum analysis of cohort responses (Wilcoxon rank-sum test)

	No response	Symptom relief	*p*-value
No. patients (%)	9 (25.7)	26 (74.3)	
Age Mean ± SD	41.0 (9.1)	54.5 (11.8)	0.015
No. gender (%)			
Male	2 (22)	6 (23)	0.959
Female	7 (78)	20 (77)	
IC/BPS type (%)			
Type II	6 (66.7)	16 (61.5)	0.644
Type III	3 (33.3)	10 (38.5)	
Symptom history (years) Mean ± SD	4.7 (2.2)	5.4 (5.2)	0.516
Pain Scale Mean ± SD	1.7 (0.5)	2.3 (0.8)	0.040
QOL Mean ± SD	5.4 (0.5)	5.7 (0.5)	0.124
Total IPSS Score Mean ± SD	22.8 (5.0)	26.7 (5.0)	0.037
PUF Bother Score Mean ± SD	6.6 (1.3)	7.9 (1.8)	0.065
PUF Symptom Score Mean ± SD	14.4 (2.4)	17.3 (3.3)	0.019
Total PUF Score Mean ± SD	21.0 (3.2)	25.2 (4.8)	0.020

SD Standard deviation, *IC/BPS* Interstitial cystitis/bladder pain syndrome, *IPSS* International Prostate Symptom Score, *PUF* Pelvic Pain and Urgency/Frequency, *QOL* Quality of life

Patient demographics stratified by no response vs symptom relief with analysis of risk factors associated with clinical effect (Mann-Whitney U test)



Kaplan-Meier curve shows maintenance time of clinical efficacy after single intramucosal triamcinolone acetonide injection

CONCLUSIONS

Submucosal TA injection has proved an effective protection profile for IC / BPS application. TA can be successful in managing both type II and type III IC / BPS symptoms, and may boost the quality of life and symptoms of male IC / BPS patients. Advanced-age patients and more serious conditions consistent with IC / BPS can have greater benefits. A broader, longer, randomized, and controlled study is needed for further analysis of TA submucosal injection for the treatment of IC / BPS.

REFERENCE

Jiang T, Zhou X, Chen Z, et al. Clinical efficacy of submucosal injection of triamcinolone acetonide in the treatment of type II/III interstitial cystitis/bladder pain syndrome. BMC Urol 2020;20: 36

A novel approach to postrobot-assisted nephron-sparing surgery persistent urinary leak with computed tomography (CT) guided percutaneous cynoacrylate glue injection.

INTRODUCTION

The most frequently identified risk in open partial nephrectomy (PN) with an occurrence in 17.4 per cent was postoperative urinary leakage. Various robotic PN series typically recorded low urinary leakage levels, varying from 0.6% to 2.5%. We explain the effective usage of percutaneous cyanoacrylate glue to overcome nephron-sparing surgery (RA NSS) that did not lead to traditional treatment with urinary fistula postrobot.

CASE PRESENTATION

Incidentally, a 53-year-old man with a left renal mass was found during a daily safety checkup and imaging. A 4.3 cm / 3.4 cm / 3.2 cm-enhancing lesion was found in the anterolateral cortex at the mid-upper pole of the left kidney for further examination. The patient was scheduled for this cT1bN0M0 lesion during regular workup for RA NSS, with a RENAL nephrometry ranking of 6a. He received RA NSS utilizing the "da Vinci Si system" under general anesthetic. The patient was in the correct lateral location, and the pneumoperitoneum was formed using a Veress needle using a closed technique. A 12-mm camera port was placed into the midline 2 cm above the umbilicus.

Two robotic ports were installed together with a single assistance device. On the hilum, single renal vein and two renal arteries were found, and traditional artery and vein clamping was done, with a warm ischemia period of 17 min. Intraoperatively a failure of the pelvicalyceal network was found, and renorrhaphy was performed in three layers. The total operative time was 2 h.

On postoperative day 0 (POD0) the drain output was 1400 ml, which on POD3 decreased gradually to 600 ml / day. The creatinine in drain fluid was 24.9 mg / dl. Ultrasonography showed no significant collection of perirenae. A 4.8 Fr double-J (DJ) stent was placed. After 48 h of -DJ stent placement, drain output remained at 400 ml/day. RGP (Retrograde Pyelography) finding during DJ stent insertion showed contrast extravasation with no localization to the site of extravasation. Subsequently, the 4.8 Fr DJ stent was upgraded to 6 Fr, but drain output continued to be 400 ml/day. Computed tomography

(CT) urography showed dehiscence of suture line with extravasation of contrast from a wedge-shaped defect in the mid-upper pole. Computed tomography imaging in axial section showing wedge-shaped defect at the upper mid-pole of the left kidney with glue (beta-cyanoacrylate:lipiodol mixture [50:50]: 6 ml) injection using a 23G spinal needle. Follow-up axial computed tomography imaging at 1 month showed no perinephric collection. Due to the lack of renal parenchym around the wedge-shaped defect and extravasation location, the feasibility of percutaneous nephrostomy placement was evaluated but deferred; however, there was no apparent link with PCS (Pelvicalyceal system) on RGP.

Since the urinary fistula was not responding to expectant management, we considered the following options:

- Glue injection at the leak site
- Angioinfarction of the upper half of the left kidney
- Open repair of the renal defect
- Left nephrectomy.

After multidisciplinary discussion, a consensus was made to glue the defect percutaneously. On POD14 under local anesthesia and CT guidance, beta-cyanoacrylate glue was injected with a 23G spinal needle over the wedge-shaped defect at the upper mid-pole of the left kidney. Cyanoacrylate: lipiodol mixture (50:50) 6 ml was used. Postprocedure, glue cast was noted in the defect, upper pole calyx, and perinephric space. Drain output decreased to 10 ml/day on postprocedure day 1 and ceased completely on day 2. The drain was eventually replaced on the 3rd day, with the next day ultrasonography revealing no perinephric collection. DJ stent was extracted, and the patient was subsequently released in satisfactory condition on day 5 of post-procedure. At 1-month follow-up picture shows no perinephric array. The artifact, associated with lipiodol-cyanoacrylate adhesive, was found in the wedge-shaped defect area at the left kidney. The individual appeared afebrile at 18-month follow-up with healthy renal activity throughout.

CONCLUSION

Glue ablation for post-RA NSS urinary fistula is a safe and effective modality.

REFERENCE

Gorsi U, Kumar S, Tyagi S, et al. A novel approach to postrobot-assisted nephron-sparing surgery persistent urinary leak - Can we glue?. Indian J Urol. 2020;36(1):62–64.