#413 Appropriate Screening for Urologic Complications After Spinal Cord Injury in a Non-designated Spinal Cord Injury Center Veterans Affairs Hospital

Alyssa Greiman, Rohail Kazi, Hayden Hill, Lindsey C. Cox
Medical University of South Carolina Charleston, SC
Ralph H Johnson Veterans Affairs Hospital Charleston, SC

OBJECTIVE

To present adherence to the Paralyzed Veterans of America screening guidelines at a non-designated SCI center as a bellwether for urologic care after spinal cord injury

Paralyzed Veterans of America clinical practice guidelines:

- Yearly urologist visit
- Yearly serum creatinine
- Renal ultrasound

METHODS

- Identified 99 patients with documented spinal cord injury seen at the Ralph H. Johnson VA Medical Center from January 2014 to December 2015
- Evaluated whether patients received:
  - Urologist visit
  - Serum creatinine
  - Upper tract imaging

RESULTS

Adherence of Clinical Practice Guidelines:

- 49% of patients had a complete urologic surveillance including a urologist visit, serum creatinine and upper tract imaging.
  - 98% had a serum creatinine
  - 86% had upper tract imaging
  - 49% saw a urologist

Bladder management:

- 9.2% of patients had a urethral foley
- 4.1% of patients had a suprapubic tube
- 35.7% of patients performed CIC
- 13.5% of patients were incontinent in diapers

Patients who performed CIC were more likely to see a urologist (p 0.034)

Urologic Sequelae:

- 29.5% had a decubitus wound
- 31.6% had urinary incontinence
- 18.4% were hospitalized for a GU reason

The above urologic sequelae were not associated with improved adherence to the guidelines

Urologic Evaluation:

- 26.5% had a PVR
- 20.4% had urodynamics
- 13.3% had a cytology
- 11.2% had a cystoscopy

	Complete Surveillance	Incomplete Surveillance	P Value
Age (mean)	63.5	61.5	0.18
Miles from Ralph H Johnson VA (mean)	54.5	57.0	0.4
Miles from Augusta SCI center (mean)	134.8	143.5	0.13
Race (N, %)			0.06
Caucasian	18 (37.5)	26 (51)	
African American	28 (58.3)	22 (43.1)	
Hispanic	0 (0)	1 (2)	
Unknown	2 (4.2)	2 (3.9)	
SCI Injury Level (N, %)			0.16
Cervical	23 (47.9)	26 (51)	
Thoracic	16 (33.3)	20 (39.2)	
Lumbar	9 (18.8)	2 (3.9)	
Sacral	0 (0)	1 (2)	
Unknown	0 (0)	2 (3.9)	
ASIA Impairment Scale (N, %)			0.39
A	17 (35.4)	15 (29.4)	
B	0 (0)	5 (9.8)	
C	7 (14.6)	6 (11.8)	
D	22 (45.8)	20 (39.2)	
Unknown	2 (4.2)	5 (9.8)	
Ambulatory Status (N, %)			0.27
Ambulatory	6 (12.5)	12 (23.5)	
Cane/Walker	13 (27)	9 (17.6)	
Wheelchair	29 (60.4)	30 (58.8)	
Medical Comorbidities (N, %)			0.83
Diabetes	15 (31.2)	17 (33.3)	
Hypertension	30 (62.5)	27 (52.9)	
Obesity	18 (37.5)	20 (39.2)	
Traumatic Brain Injury	1 (2.1)	4 (7.8)	
Substance Abuse	11 (22.9)	8 (15.7)	
Mental Illness	16 (33.3)	21 (41.2)	

CONCLUSIONS

Surveillance for common urologic complication after spinal cord injury per the Paralyzed Veterans of America clinical practice guideline including a yearly urologist visit, serum creatinine and upper tract imaging was performed in 49% of Veterans with SCI seen at a single non-designated SCI center Veterans Affairs Hospital.

There were no identifiable predictive factors to aid in determining who is most likely to receive a complete evaluation.

FUTURE DIRECTIONS

- Compare this data to other VA hospitals across the country and to other designated SCI centers
- Compare complication rates of those who receive complete evaluations to those who do not prospectively