



Comparison of Nurse Practitioner Knowledge and Treatment Choices for Chronic Unexplained Orchialgia



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Introduction

Chronic unexplained orchialgia (CUO) is “a subjective negative experience of adult men, perceived as intermittent or continuous pain of variable intensity, present at least three months, localizing to the testis(es), in the absence of objective organic findings, that interferes with quality of life” (Quallich & Arslanian-Engoren, 2013)

CUO is a chronic pain condition with an evaluation and treatment algorithm from a urologic perspective but not a chronic pain perspective

- Little high-quality research has been published
- This is contrary to Institute of Medicine (IOM, 2011) goal for increasing safe and effective treatment of pain

Purpose Statement

The aim of this study was to compare knowledge, treatment choices and referral patterns between two groups of NPs treating men with chronic unexplained orchialgia.

Methods

Descriptive survey design, based on a convenience sample of nurse practitioners

Three strategies for recruitment

- Urology-focused NPs attending Society of Urologic Nurses and Associates (SUNA) 2013 annual conference
- e-mailed survey link sent to SUNA APRN discussion group
- Data collection from attendees at 2014 AANP annual conference, for comparison group of non-urology “generalist” NPs

2-page survey designed for the study, based on current algorithms for diagnosis and treatment of both CUO (Benson & Levine, 2012) and chronic nonmalignant pain (IASP, 2012)

Prevalence calculated from average clinic population over 30 days

Results

Total sample = 396

- average age 47; 9.06 years NP experience
- 51 urology-focused NPs
 - average age 49.2; 11.86 years NP experience
- 345 “generalist” NPs
 - average age 46.7; 8.64 years NP experience

Certification	Urology-Focused NPs	Generalist NPs	Total sample
Acute Care	7.84%	5.8%	6.06%
Adult	39.22 %	22.32%	24.49%
Family	39.22 %	70.72%	66.67%
Geriatric	7.84%	4.93%	5.30%
Pediatric	1.96%	0.87%	1.01%
Women’s Health	2.92%	0.29%	0.76%

Practice focus	Urology-Focused NPs	Generalist NPs	Total sample
Hospital inpatient	5.88%	11.59%	10.86%
Hospital-based clinic	45.10%	14.78%	18.69%
VA clinic	11.76%	4.93%	5.81%
Private practice	37.25%	30.72%	31.57%
Rural clinic	5.88%	14.49%	13.3%
Independent NP practice	1.96%	5.51%	5.05%
Surgical center	0.00%	0.29%	0.25%
Other (please specify)	7.84%	32.46%	29.29%

Suspected causes for chronic unexplained orchialgia*

Suspected etiology	Urology-Focused NPs	Generalist NPs	Total sample
Chronic prostatitis	54.90%	48.70%	49.49%
Epididymal cyst	33.33%	26.09%	27.02%
Hydrocele	27.45%	31.88%	31.31%
Infection	56.86%	60.87%	60.35%
Inflammation	82.35%	66.09%	68.18%
Inguinal hernia	37.25%	38.84%	38.64%
Pelvic floor dysfunction	62.75%	19.71%	25.25%
Radicular symptom	64.71%	33.91%	37.88%
Somatization	49.02%	20.00%	23.74%
Spermatocele	41.18%	21.74%	24.24%
Stress	49.02%	18.26%	22.22%
Torsion	11.76%	21.74%	20.45%
Tumor	17.65%	24.64%	23.74%
Varicocele	49.02%	36.81%	38.38%
I don’t know	11.76%	7.25%	7.83%

Medications NPs prescribed for chronic unexplained orchialgia*

Medication	Urology-Focused NPs	Generalist NPs	Total sample
Acetaminophen	29.41%	28.41%	28.54%
Antibiotics	58.82%	49.28%	50.51%
Anxiolytics	9.80%	4.35%	5.05%
Injected local anesthetics	17.65%	4.06%	5.81%
Muscle relaxants	31.37%	10.14%	12.88%
Narcotics	7.84%	13.91%	13.13%
Neurontin	47.06%	19.71%	23.23%
NSAIDs	94.12%	71.59%	74.49%
Pregablin	17.65%	7.83%	9.09%
SSNRIs (e.g. duloxetine)	15.69%	13.04%	13.3%
Steroid injections	7.84%	3.19%	3.79%
TCAs (e.g. amitriptyline)	37.25%	11.88%	15.15%
Other (please specify)	7.84%	2.61%	3.28%
I Don’t know	0.00%	11.88%	10.35%

Other therapies NPs would recommend*

Therapy	Urology-Focused NPs	Generalist NPs	Total sample
Acupuncture	23.53%	7.83%	9.85%
Massage therapy	23.53%	6.67%	8.84%
Pain clinic referral	80.39%	18.26%	26.26%
Pelvic floor physical therapy	66.67%	20.87%	26.77%
Physical therapy	58.86%	14.20%	19.70%
Psychiatry evaluation	9.80%	6.09%	6.57%
Psychology evaluation	23.53%	6.96%	9.09%
Urology clinic referral	35.29%	88.12%	81.31%
Other	9.80%	3.77%	4.55%

NPs evaluated men with CUO who had undergone previous treatments*

Treatment	Urology-Focused NPs	Generalist NPs	Total sample
No previous evaluation/treatment	50.82%	59.71%	59.60%
Other nerve block(s)	21.57%	7.25%	9.09%
Previous treatment by another provider	31.37%	25.80%	26.52%
Spermatic cord block	29.41%	4.06%	7.32%
Surgery	43.14%	19.42%	22.47%

* Note. Respondents could choose multiple responses.

Summary

This is the first study to report an estimated prevalence for *specifically* for CUO within a patient population, for any group of providers

- Prevalence of men with CUO in the clinical population of the complete NP sample was **2.12%**
- CUO prevalence was **3.57%** in the clinical population of urology-focused NPs and **1.77%** in the clinical population of generalist NPs

Reported management pattern was consistent with suspected etiology

- Offers insight into NP knowledge about a specific urologic, chronic pain and men’s health issue in a sample representative of the current NP population as a whole (Chattopadhyay, Zangaro & White, 2015)

Findings suggest that a urology focus, a longer time in practice, and more clinical experience managing urology patients influenced the different management approach to CUO seen with the urology-focused NPs

- Closer to a chronic pain management perspective

Urology-focused NPs suspected radicular or pelvic floor etiology for CUO, a very contemporary perspective on its potential cause

- Treatment choices and referral patterns of the urology-focused NPs suggest an attempt to treat both the cause of pain and the pain itself

Limitations: NPs self-reported a focus in urology; small sample size prevents generalizability; calculated prevalence may suffer from recall bias

Conclusions

This study provides important insight into NP management patterns for a historically under-described male chronic pain population

Findings suggest that with increased specialization and post-graduate education, urology-focused NPs are taking a more active role in management of this unique chronic pain condition

Results provide a basis for building knowledge to improve care in this unique area of nonmalignant chronic pain

Adds to the body of data describing specialty NP practice in urology

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