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

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Introduction

Chronic unexplained orchalgia (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" (Qualllich & 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 orchalgia.

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
- Prevalence calculated from average clinic population

- 51 urology-focused NPs
- average age 49.2; 11.86 years NP

- 345 “generalist” NPs
- average age 47; 9.06 years NP

Closer to a chronic pain management perspective

> Prevalence calculated from average clinic population

> Algorithms for diagnosis and treatment of both

> Practices for comparison group of non-urology “generalist” NPs

> Based on a convenience sample of nurse practitioners

> 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

Medications NPs prescribed for chronic unexplained orchalgia

<table>
<thead>
<tr>
<th>Medication</th>
<th>Urology- Focused NPs</th>
<th>Generalist NPs</th>
<th>Total sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetaminophen</td>
<td>59.82%</td>
<td>49.52%</td>
<td>59.51%</td>
</tr>
<tr>
<td>Antidepressants</td>
<td>38.82%</td>
<td>39.34%</td>
<td>39.34%</td>
</tr>
<tr>
<td>Anticonvulsants</td>
<td>17.55%</td>
<td>4.06%</td>
<td>5.01%</td>
</tr>
<tr>
<td>Muscle relaxants</td>
<td>31.37%</td>
<td>10.14%</td>
<td>12.88%</td>
</tr>
<tr>
<td>Narcotics</td>
<td>7.84%</td>
<td>13.91%</td>
<td>13.91%</td>
</tr>
<tr>
<td>Neurontin</td>
<td>47.06%</td>
<td>19.71%</td>
<td>23.35%</td>
</tr>
<tr>
<td>Opiates</td>
<td>65.17%</td>
<td>18.75%</td>
<td>25.92%</td>
</tr>
<tr>
<td>Prednisone</td>
<td>17.55%</td>
<td>7.83%</td>
<td>9.99%</td>
</tr>
<tr>
<td>Topical treatments</td>
<td>5.51%</td>
<td>7.83%</td>
<td>6.67%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>7.83%</td>
<td>6.67%</td>
<td>7.25%</td>
</tr>
</tbody>
</table>

Other therapies NPs would recommend

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

Conclusion

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 providing knowledge to improve care in this unique area of nonmalignant chronic pain

References


Note: Respondents could choose multiple responses.

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

NP evaluations men with CUO who had undergone previous treatments

<table>
<thead>
<tr>
<th>Treatment approach</th>
<th>Urology- Focused NPs</th>
<th>Generalist NPs</th>
<th>Total sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>prostate biopsy</td>
<td>50.82%</td>
<td>59.71%</td>
<td>59.60%</td>
</tr>
<tr>
<td>Other nerve blocks</td>
<td>21.57%</td>
<td>7.25%</td>
<td>9.09%</td>
</tr>
<tr>
<td>Previous treatment by another provider</td>
<td>31.37%</td>
<td>20.83%</td>
<td>25.62%</td>
</tr>
<tr>
<td>Spinal cord block</td>
<td>29.41%</td>
<td>4.06%</td>
<td>7.32%</td>
</tr>
</tbody>
</table>

* Note: Respondents could choose multiple responses.

Conclusion

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 providing knowledge to improve care in this unique area of nonmalignant chronic pain

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

I don’t know/0.00% 11.86% 10.35%

Total sample = 396

Prevalence calculated from average clinic population

CUNP: Certified Urology Nurse Practitioner

Note: Respondents could choose multiple responses.

References


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