An Assessment of Abuse and Violence in Neurology Clinic Patients

Ashley Roque, Anna Hohler, MD
Department of Neurology, Boston Medical Center, Boston University School of Medicine
Background

• Abuse and violence is prevalent in our culture and can cause serious health consequences for its victims.
  • Estimated that 1 in 4 women has experienced domestic abuse in her lifetime

• Recent studies have demonstrated an association between abuse and neurological conditions.

• Women who are the victims of intimate partner violence experience higher rates of headache and neck and back pain than those who have never experienced abuse.
• Childhood maltreatment is associated with significant increase in the likelihood of recurrent migraines, chronic daily headaches, and non-epileptic seizures in adulthood.

• In addition, many neurology patients have physical and/or cognitive difficulties that put them at increased risk for experiencing abuse.

• Despite the prevalence of a history of abuse and increased risk of experiencing abuse in neurology patients, neurologists are not routinely asking patients about abuse and violence.

• Screening for domestic abuse has become the standard of care in many fields of medicine, as recommended by the American Medical Association, but is not standard practice in neurology.
Study Goals

In this study our aim was to better characterize the relationship between abuse and neurology patients by determining:

1. The prevalence of a history of abuse in patients attending a university neurology clinic specializing in movement disorders

2. The prevalence of different types of abuse (physical, emotional, sexual, financial, or exposure to abuse) experienced by the population

3. If there are any particular neurological diagnoses that are associated with a history of abuse.
Methods

• Retrospective Chart Review

• All patients presenting to Boston University Neurological Associates for office visits with the PI, Dr. Anna Hohler, a movement disorder specialist, from June 1, 2010- August 1, 2010,

• All patients asked to complete intake questionnaire before being seen.

• Questionnaire included questions pertaining to the patients’ current medical conditions, medications, past medical history, and history of abuse and violence.

• During office visit the questions pertaining to abuse and violence were repeated verbally and clarified if necessary.
Figure 1: Abuse and Violence Questions included on Office Intake Questionnaire

1. Has anyone ever hit, kicked, choked or hurt you physically?  
   Yes  No

2. Has anyone ever threatened you or your belongings or intimidated you?  
   Yes  No

3. Has anyone ever forced you to participate in a sexual encounter?  
   Yes  No

4. Has anyone ever restricted, limited, or tried to control your finances?  
   Yes  No

5. Have you ever been a witness of abuse or violence?  
   Yes  No

6. Do you feel safe in your relationship?  
   Yes  No
Results

- **103** Separate Patients Screened
- **21.34%** of Patients reported a history of abuse/violence
- Being a witness to abuse or violence was the type of abuse most commonly reported, with 64.74% of patients who experienced abuse reporting experiencing this type.
- The second most common form of abuse was physical abuse (40.9%) followed by sexual and emotional abuse (36.4% each) and financial abuse (22.73%).
Table 1. History of Abuse/Violence Reported by Neurology Patients

<table>
<thead>
<tr>
<th>History of Abuse</th>
<th>N = 103 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>N = 22 (21.30)</td>
</tr>
<tr>
<td>No</td>
<td>N = 81 (78.7)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Abuse</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td>5 (22.73)</td>
</tr>
<tr>
<td>Emotional</td>
<td>8 (36.4)</td>
</tr>
<tr>
<td>Sexual</td>
<td>8 (36.4)</td>
</tr>
<tr>
<td>Physical</td>
<td>9 (40.9)</td>
</tr>
<tr>
<td>Witness to Abuse and Violence</td>
<td>14 (63.64)</td>
</tr>
</tbody>
</table>
The total number of neurological diagnoses seen among patients reporting a history of abuse was 50.

These diagnoses were then grouped into 13 different classes of neurological disorders.

The classes of neurological diagnoses that were seen more frequently in patients who reported a history of abuse were:

- Chronic pain
- Neuropathy
- Autonomic dysfunction
- Parkinson’s disease
- Headache
Table 3. Neurological Diagnoses seen in Patients Reporting a History of Abuse

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic Pain not headache</td>
<td>23</td>
</tr>
<tr>
<td>Neuropathy</td>
<td>11</td>
</tr>
<tr>
<td>Autonomic Dysfunction</td>
<td>7</td>
</tr>
<tr>
<td>PD</td>
<td>6</td>
</tr>
<tr>
<td>Headache</td>
<td>6</td>
</tr>
<tr>
<td>Gait disturbance</td>
<td>4</td>
</tr>
<tr>
<td>Memory Loss</td>
<td>3</td>
</tr>
<tr>
<td>Vertigo</td>
<td>2</td>
</tr>
<tr>
<td>Tremor</td>
<td>2</td>
</tr>
<tr>
<td>Sleep disturbance</td>
<td>2</td>
</tr>
<tr>
<td>MS</td>
<td>2</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>2</td>
</tr>
<tr>
<td>Dystonia</td>
<td>2</td>
</tr>
</tbody>
</table>
Conclusions

- A significant proportion of patients in a university neurology clinic have experienced abuse or violence in their lifetime.
- This high prevalence supports the need for routine screening for abuse and violence by neurologists to improve the care and safety of their patients.
- Chronic pain, neuropathy, autonomic dysfunction, headache and Parkinson’s Disease were diagnoses seen more frequently in patients with a history of abuse.
- Previous studies found higher rates of headaches, migraines, chronic pain, and non-epileptic seizures in patients who reported a history of abuse.
- One reason for this discrepancy could be related to the fact that these patients were seen in a predominantly Movement Disorder and Autonomic clinic. There were fewer general neurology patients.


Hohler A and Rush S. The Role of the Neurologist in Cases of Abuse and Neglect. The Neurologist. 2007; 13(2): 73-78
Acknowledgments

This work was supported by the Boston University School of Medicine Medical Student Summer Research Scholarship.