INTRODUCTION

The most common psychiatric complication in patients affected by Parkinson’s Disease (PD) is depression. Screening accurately for depression in PD is clinically relevant as depression is associated with a reduced Health Related Quality of Life, a more rapid progression of motor deficits, and increased caregiver stress. Screening for depression clinically in a PD population is challenging as PD manifestations may mimic depression (e.g. facial masking, change in appetite and insomnia).

The purpose of this study is to compare depression inventories in PD and normal elderly controls (NC) looking for patterns to help guide clinical management.

Screening tools currently validated for screening of depression in PD include Beck Depression Inventory, Geriatric Depression Scale, and Hamilton Depression Scale.

METHODS

Subjects were drawn from the Banner Sun Health Research Institute’s Brain and Body Donation Program (BBDP), an IRB approved study.

Scales used in this study were scales routinely administered as part of BBDP. Cut-off scores were determined from literature review. All statistical analyses performed using SAS software Version 9.1. Means were compared by using the two-sample t test, proportions were compared by using the Pearson chi-square test, and odds ratios were assessed by using logistic regression.

Inclusion: Enrolled in the BBDP. Completion of the necessary depression related assessments. Diagnosis of either clinically probable Parkinson’s Disease or Normal Control. Included regardless of treatment for depression.

Exclusion: Dementia or other neurodegenerative disease.

RESULTS SUMMARIZED

The overall trends in the data were consistent between the scales with the PD group showing more positive depression screens than NC.

<table>
<thead>
<tr>
<th>Depression</th>
<th>Parkinson’s</th>
<th>Normal Control</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean, (SD), n</td>
<td>3.8, (3.2), 89</td>
<td>2.8, (3.3), 507</td>
<td>.02</td>
</tr>
<tr>
<td>Positive Screens</td>
<td>5/89 (6%)</td>
<td>23/507 (5%)</td>
<td>.66</td>
</tr>
</tbody>
</table>


LIMITATIONS

Limitations to the study include not having a gold standard comparison to validate the findings in the screening tools. Inclusion of the HAMD and GDS which have been validated for use in PD served as reference. These scales are intended for screening of depression only, not diagnosis. Therefore a positive screen should only prompt further clinical investigation, and not be the final decision in diagnosing depression.

CONCLUSIONS

The pattern of positive depression screens between PD patients and NC was similar across the scales analyzed in this study. Informant information seems particularly useful for screening, particularly for elderly controls. This may have implications for primary care, where elderly individuals come alone to office visits. Self-administered tools for the office seem to be a good starting point for patients or controls which could be followed by a clinician driven semi-structured interview. Screening with multiple modalities may prove useful in the clinical setting. Caregiver and informant driven information should be explored further as to relevance for clinical practice.

ACKNOWLEDGMENTS

Thank you to the patients and families enrolled in the Brain and Body Donation Program who allow continued research in normal aging, Parkinson’s Disease, and Alzheimer’s Disease. Thank you to UACOM-Phoenix for including scholarly research in the medical school curriculum.

SOURCES

8. Stalnaker SE, Meso N. The Unified Parkinson’s Disease Rating Scale: validation study of the mentation, behavior, and mood section. Mov Disord 2007;22(10):1716-71