

Baseline Predictors of Survival in Patients with Parkinson’s Disease: a 10-year Longitudinal Cohort Study

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Background and objective

Long-term outcomes in Parkinson’s disease (PD) vary substantially, and the factors underlying this heterogeneity remain incompletely understood. [1,2]

We examined whether baseline characteristics in the early motor phase were associated with survival after 10 years.

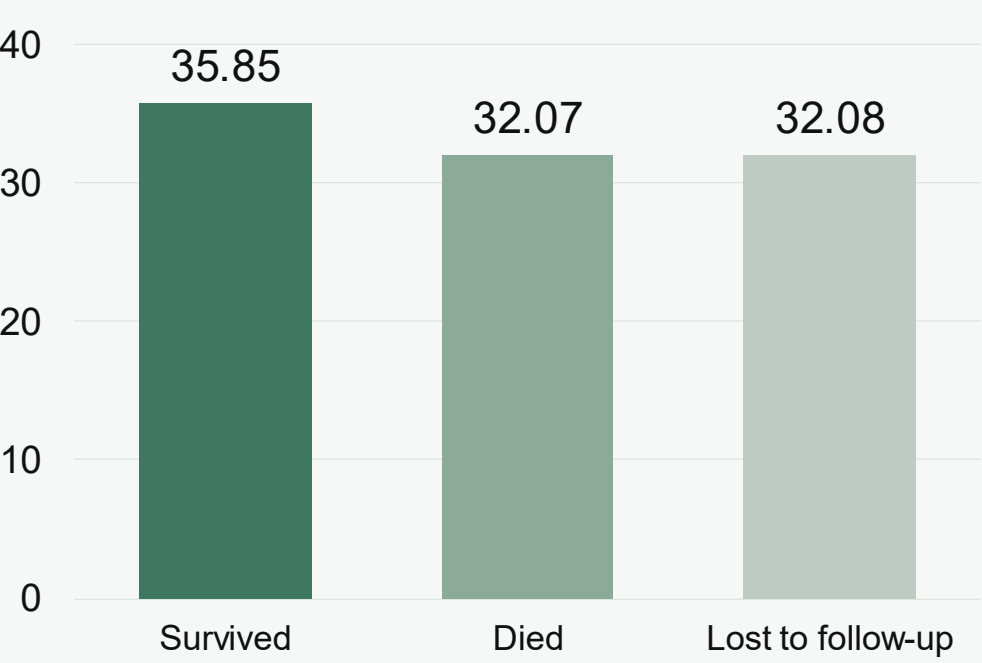
Materials and methods

A prospective cohort of 106 newly diagnosed patients with PD was followed for 10 years. Baseline assessments covered motor and non-motor symptoms, autonomic dysfunction, psychiatric symptoms, sleep and cognition.

Patients with known outcomes were classified as survivors or non-survivors at year 10.

Results

Cohort status after 10 years



Percentages refer to all 106 enrolled patients.

Baseline predictors of survival

Younger age

OR = 0.879; p < 0.001

Earlier disease onset

OR = 0.900; p < 0.001

Higher ACE-R memory score

OR = 1.153; p = 0.028

OR, odds ratio. ACE-R, Addenbrooke’s Cognitive Examination–Revised.

Baseline differences between outcome groups

Characteristic	Survivors	Non-survivors	p
Age, years	57.67 ± 9.99	64.44 ± 7.47	<0.001
Age at onset, years	55.05 ± 11.31	63.68 ± 7.58	<0.001
Education, years	13.50 ± 2.64	12.58 ± 2.73	0.029

Values are mean ± standard deviation.

Other baseline domains

Motor and non-motor symptom severity, autonomic dysfunction, psychiatric and sleep disturbances, and global cognitive scores were not significant predictors of 10-year survival.

Conclusion

Younger baseline age, earlier disease onset and better memory performance were associated with 10-year survival. Survivors also had more years of education. Memory-domain performance may provide prognostic information that is not captured by global cognitive scores.

Interpretation: 32.08% were lost to follow-up. The observed proportion surviving is not a censoring-adjusted survival estimate.

Selected references

1. Williams-Gray CH et al. The CamPaIGN study of Parkinson’s disease: 10-year outlook in an incident population-based cohort. J Neurol Neurosurg Psychiatry. 2013;84:1258–1264. 2. Post B et al. Prognostic factors for the progression of Parkinson’s disease: a systematic review. Mov Disord. 2007;22:1839–1851.