Research Poster Awards 2023

Barwon Health

DEAKIN UNIVERSITY

Cancer-related cognitive impairment in patients with newly diagnosed aggressive lymphoma compared to healthy controls: An exploratory study

Project Team Leader: Priscilla Gates. Project Team Members: Haryana M Dhillon, Mei Krishnasamy, Carlene Wilson, Karla Gough.

INTRODUCTION

Cancer related cognitive impairment is a distressing and disabling symptom commonly reported by patients. While persistent changes in cognitive function are reported among lymphoma survivors, there is a paucity of data.

This study aims to: describe self-reported cognitive function and neuropsychological performance in a lymphoma population and compare with healthy controls.

METHOD

Secondary analysis of data from a feasibility study of 30 patients with newly diagnosed aggressive lymphoma[1] and 72 healthy controls[2]

RESULTS

Patients and healthy controls were well matched on key demographic variables (Table 1)

CONCLUSION

There is need for larger scale longitudinal studies to inform the development of targeted interventions to address cognitive impairment and the optimal time in the disease trajectory to deliver them.

SIGNIFICANCE OF RESEARCH

In many people newly diagnosed with aggressive lymphoma, cognitive impairment precede chemotherapy and remain evident after chemotherapy.

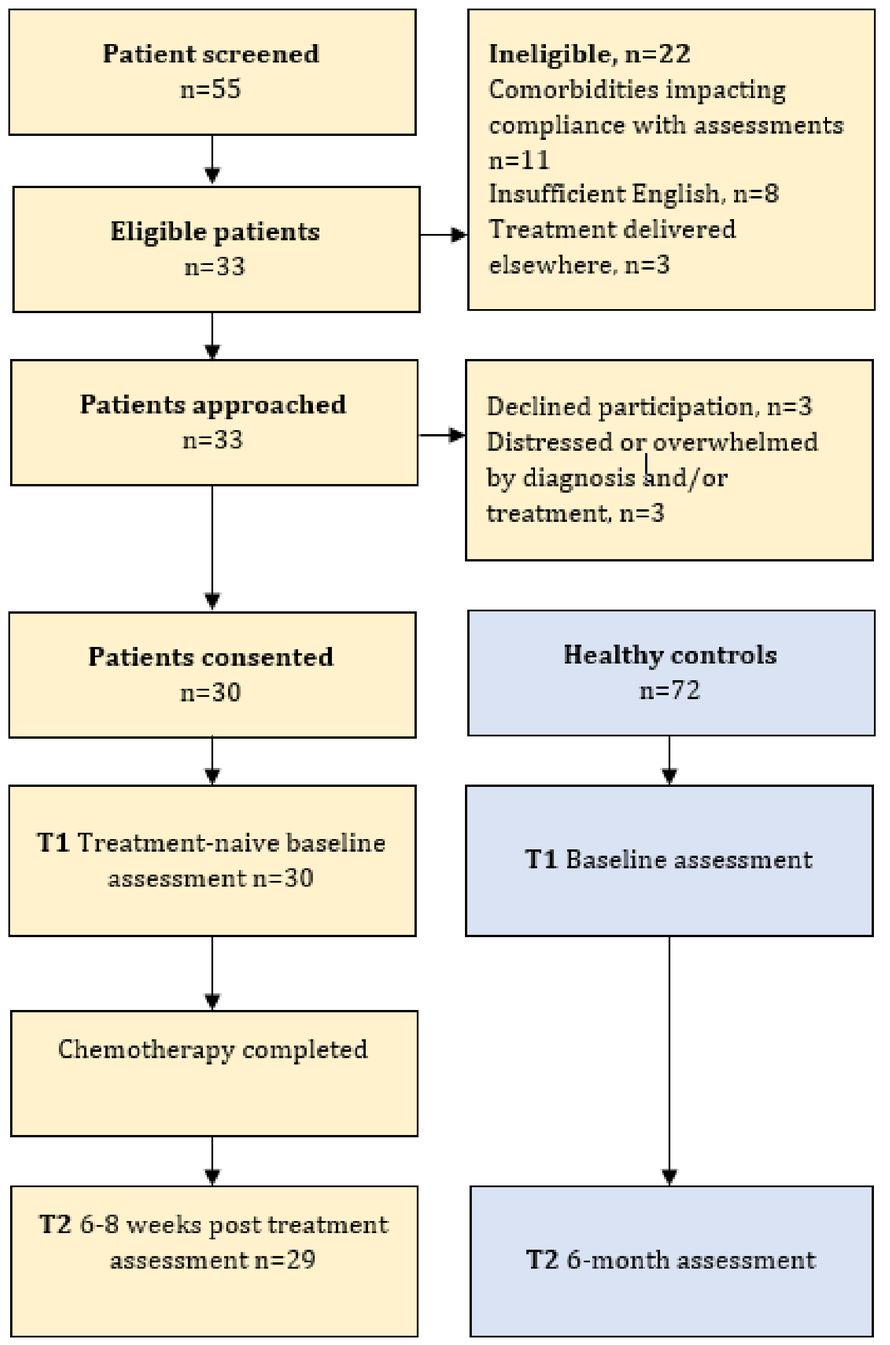

Table 1: Differences in self-reported cognitive function and neuropsychological performance in patients (n=30) and healthy controls (n=72) at baseline and follow-up

Measure/(sub)scale	Between-groups comparisons			
	Baseline		Follow-up	
	Diff (95% CI)	*Cohen's d*	Diff (95% CI)	*Cohen's d*
FACT-Cognitive Function				
PCI	1.9 (-2.6, 6.4)	0.18	-2.6 (-7.1, 2.0)	0.25
Impact of PCI on QOL	-3.9 (-5.1, -2.8)***	1.44	-3.5 (-4.7, -2.3) ***	1.27
PCA	0.8 (-1.6, 3.2)	0.14	-1.9 (-4.4, 0.5)	0.35
Trail Making Test (executive functioning)				
A score	-10.0 (-14.2, -5.8) ***	1.03	-10.2 (-14.4, -6.0) ***	1.06
B score	-10.2 (-15.1, -5.3) ***	0.90	-11.6 (-16.7, -6.7) ***	1.03
Hopkins Verbal Learning Test (verbal learning and memory)				
Total Recall	-8.4 (-12.7, -4.1) ***	0.85	-6.4 (-10.7, -2.1) ***	0.65
Delayed Recall	-11.6 (-16.3, -7.0) ***	1.09	-9.7 (-14.3, -5.0) ***	0.91
Retention	-8.2 (-12.6, -3.9) **	0.82	-8.0 (-12.4, -3.6) ***	0.80
Digit Span (attention/working memory)				
Total	-4.4 (-8.4, -0.4) *	0.47	-6.0 (-10.0, -2.0) ***	0.65

1. Gates P et al. .*Support Care Cancer* 2022
2. Vardy JL et al . *J Clin Oncol* 2015;33(34):4085-92.

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