

Supplementary Method 1. Global Deterioration Scale

The Global Deterioration Scale (GDS) is a validated, reliable instrument for describing the clinical progression of dementia.¹ It is also used to determine the prognosis of patients with carbon monoxide (CO) poisoning²⁻⁴ and those with severe chronic obstructive pulmonary disease, Alzheimer's disease, and vasculopathy-related dementia.^{1,5-7}

Although the GDS score is not as diverse as a CO battery, it has the advantage of being able to recognize neurocognitive functions, such as memory and concentration, as well as activities of daily living, through interviews. Moreover, many neurocognitive function tests may be difficult for patients with sequelae. The Short-Form General Health Survey-36, a commonly used testing tool, has a set of self-reported questions; however, it is limited in evaluating patients with severe neurological impairment as it requires the ability to understand and address the questions. Digit span, trail making, and clock drawing are good evaluation tools but require short-term memory and visuospatial functions. Therefore, the GDS score can be used for all patients with CO poisoning, regardless of poisoning severity. The scale consists of 7 scores, with higher scores indicating greater severity.

REFERENCES

1. Reisberg B, Ferris SH, de Leon MJ, Crook T. The Global Deterioration Scale for assessment of primary degenerative dementia. *Am J Psychiatry* 1982;139:1136-9.
2. Kim SJ, Thom SR, Kim H, et al. Effects of adjunctive therapeutic hypothermia combined with hyperbaric oxygen therapy in acute severe carbon monoxide poisoning. *Crit Care Med* 2020;48:e706-14.
3. Cho DH, Ko SM, Son JW, Park EJ, Cha YS. Myocardial injury and fibrosis from acute carbon monoxide poisoning: a prospective observational study. *JACC Cardiovasc Imaging* 2021;14:1758-70.
4. Lee Y, Cha YS, Kim SH, Kim H. Effect of hyperbaric oxygen therapy initiation time in acute carbon monoxide poisoning. *Crit Care Med* 2021;49:e910-9.
5. Paul RH, Cohen RA, Moser DJ, et al. The Global Deterioration Scale: relationships to neuropsychological performance and activities of daily living in patients with vascular dementia. *J Geriatr Psychiatry Neurol* 2002;15:50-4.
6. Eisdorfer C, Cohen D, Paveza GJ, et al. An empirical evaluation of the Global Deterioration Scale for staging Alzheimer's disease. *Am J Psychiatry* 1992;149:190-4.
7. Ozge C, Ozge A, Unal O. Cognitive and functional deterioration in patients with severe COPD. *Behav Neurol* 2006;17:121-30.