GASTROINTESTINAL DYSFUNCTION IN DEMENTIA WITH LEWY BODIES: A COMPARISON WITH PARKINSON’S DISEASE

Hypothesis / aims of study
Dementia with Lewy bodies (DLB) is the second most common degenerative cause of dementia, while gastrointestinal tract (GI) function in DLB patients has not been fully delineated. We investigated GI function in DLB by clinical-gastric emptying-colonic transit observations, and compared them with those of Parkinson’s disease (PD) patients.

Study design, materials and methods
We examined 16 DLB (mean age 77.0 years; mean duration 2.3 years) and 46 PD patients (mean age 68.8 years; mean duration 2.3 years). All patients underwent a gastric emptying test (\(^{13}\)C-octanoic acid expiration breath test) and a colonic transit time (CTT) test (7-day Sitzmarks test).

Results
1) gastric emptying: Tmax (the peak time of the \(^{13}\)C-dose-excess curve, normal 45min; Tmax >75 min is regarded marked) of DLB group (63.2 min) was significantly prolonged than that of PD group (52.3 min) (p<0.05). Similarly, percent marked (>75 min) cases in DLB group (42.1%) was significantly larger than that of PD group (15.2%) (p<0.05). 2) CTT: CTT was not different significantly between both groups (data not shown).

Interpretation of results
As compared with PD group, upper GI dysfunction is significantly altered in DLB, while lower GI dysfunction is not in the present study. This might reflect prominent Lewy body pathology of the GI plexus in DLB. GI dysfunction in DLB might lead to nausea, vomiting, gastroesophageal reflux, affecting drug absorption, and also acute intestinal pseudo-obstruction.

Concluding message
Upper GI dysfunction is significantly altered in DLB. Since in elderly population DLB is common, care is needed in DLB patients for GI problems.

Disclosures
Funding: We have no funding. Clinical Trial: No Subjects: HUMAN Ethics Committee: Ethics Committee in Sakura Medical Center, Toho University Helsinki: Yes Informed Consent: Yes