

Cognitive impairment predicts worse outcome in heart failure

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Cognitive impairment predicts worse outcome in elderly heart failure patients, reveals research presented today at Heart Failure 2015 by Hiroshi Saito, a physiotherapist at Kameda Medical Centre in Kamogawa, Japan. Patients with cognitive impairment had a 7.5 times greater risk of call cause death and heart failure readmission.

Heart failure [patients](#) with cognitive impairment may get progressively worse at adhering to medications, leading to poorer prognosis.

Heart Failure 2015 is the main annual meeting of the Heart Failure Association (HFA) of the European Society of Cardiology (ESC) and takes place 23 to 26 May in Seville, Spain.

Mr Saito said: "Systematic reviews have shown that cognitive impairment is common in patients with [chronic heart failure](#). However, the impact of cognitive impairment on the prognosis of heart failure patients is not known. Our study investigated whether cognitive impairment independently predicted the outcome of elderly patients with heart failure."

The study retrospectively included 136 patients aged 65 years or over with heart failure who were admitted to Kameda Medical Centre. The Mini Mental State Examination (MMSE) was conducted to evaluate the presence of cognitive disorder in all patients before discharge. Patients were divided into two groups: those with cognitive disorder (score below 27 on the MMSE) and those without (score 27 or above).

Patients were 82 years old on average and 47% were men. According to the MMSE, 101 patients (74%) had [cognitive disorder](#). After a follow up of 161 days, 33 patients (24%) were readmitted due to heart failure or died.

The researchers found that the prognosis of patients in the cognitive impairment group was

significantly worse than the non-cognitive impairment group. They also showed that cognitive impairment predicted a 7.5 times greater risk of worse prognosis in elderly patients with heart failure. The risk remained even after adjusting for other prognostic factors including age, gender, body mass index, albumin, haemoglobin, brain natriuretic peptide (BNP), C-reactive protein (CRP), ejection fraction, estimated glomerular filtration rate (eGFR) and blood urea nitrogen (BUN).

Mr Saito said: "Our study shows that cognitive impairment is common in elderly patients with heart failure, occurring in three-quarters of patients. We also found that cognitive impairment is an independent predictor of worse prognosis in elderly heart failure patients, who had a 7.5 times greater risk of all cause death or heart failure readmission."

He added: "We expect that heart failure patients with cognitive impairment tend to get progressively worse at adhering to medications. It is possible that this could explain why they have a worse prognosis. Cardiologists and other medical staff should assess the cognitive status of elderly heart failure patients."

Mr Saito continued: "When cognitive status is impaired we should provide education on disease management to families to prevent heart failure readmission of their loved ones. The three major components of this are medication, nutrition, and exercise. Of these three components, medication is an especially important element. It is necessary for families to enhance medication adherence for patients who are unable to manage their medication by themselves."

He concluded: "There are no specific treatments for [cognitive impairment](#) in heart failure patients. If patients do not have shortness of breath resulting from their heart failure, we often recommend mild exercise such as walking to maintain their cognitive function. Clinicians need to be more aware of the

cognitive status of their [heart failure](#) patients and families can play an important role in ensuring that patients take their medication, get some exercise and eat well."

More information: The scientific programme is available [here](#).

Provided by European Society of Cardiology

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