Gout drug reduces adverse events in patients with hyperuricaemia

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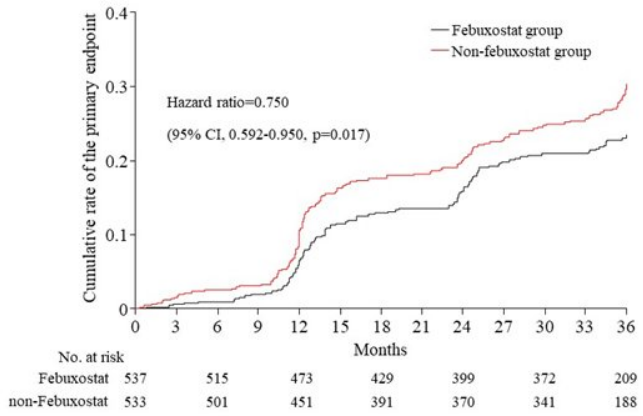

Kaplan–Meier curves for the primary composite event. Credit: European Society of Cardiology

Uric acid reduction with the gout treatment febuxostat reduces adverse events in elderly patients with hyperuricaemia, according to late breaking research presented today in a Hot Line Session at ESC Congress 2018.

Hyperuricaemia, an abnormally high serum uric acid level, causes gout and is associated with coronary artery disease, hypertension, stroke, renal failure, and death. The FREED study examined whether lowering uric acid with febuxostat prevents cerebral, cardiovascular and renal events and death in elderly patients with the condition.

The study enrolled 1,070 patients aged 65 years and older with hyperuricaemia (serum uric acid 7–9 mg/dL) and at risk for cerebral, cardiovascular, or renal events as defined by the presence of hypertension, type 2 diabetes, renal disorder, or a history of cerebral or cardiovascular disease.

Patients were randomly assigned in a 1:1 ratio to receive oral febuxostat for 36 months or not. In the febuxostat group, the dose was increased stepwise from 10 to 40 mg per day if tolerated. In the non-febuxostat group, allopurinol 100 mg was considered if serum uric acid was elevated. In both groups, the dose of febuxostat or allopurinol was adjusted to avoid a serum uric acid level less than 2 mg/dL. All patients were advised to consume a healthy diet, quit smoking, and exercise to help manage their hyperuricaemia.

Patients were followed-up for 36 months for the primary endpoint which was a composite of cerebral, cardiovascular, and renal events, and death from any cause. This consisted of death due to cerebral or cardiorenal vascular disease, new or recurring cerebrovascular disease, new or recurring coronary artery disease, cardiac failure requiring hospitalisation, arteriosclerotic disease requiring treatment, renal disease (development of microalbuminuria, progression to overt proteinuria, or worsening of overt proteinuria to ?300 mg/g albumin/creatinine, doubling of serum creatinine level, progression to end stage renal disease defined as estimated glomerular filtration rate