

## 고요산혈증 있는 신장이식환자에서의 febuxostat 사용: 단기간의 추적 관찰 연구

울산대학교 의과대학 아산병원 내과

장영주, 박수길

### Febuxostat in Renal Transplant Recipients with Hyperuricemia : Short-term Follow-up Study

Young Joo Jang, Su Kil Park

Internal Medicine Asan Medical Center Collage of Medicine University of Ulsan Seoul Korea

**Background:** Hyperuricemia is frequently found in renal allograft recipients. Recently, Febuxostat, a selective nonpurine inhibitor of xanthine oxidase, was approved for the treatment of hyperuricemia. Febuxostat might be an alternative agent for the patient who cannot use allopurinol, because of more selective and less allergenic than allopurinol. However, information concerning the effectiveness and safety of this drug among renal allograft recipients is not well known.

**Method:** 7 renal allograft recipients, who treated febuxostat between august 2012 and march 2013, and maintained estimated glomerular filtration rate above 30 ml/min/1.73m<sup>2</sup> were assessed retrospectively. Of these, 2 patients has not been used urate lowering agent before, and the other 5 patients were changed from oral allopurinol to febuxostat. Febuxostat was administered at a dose of 40 mg in 6, 20 mg in 1 patient. Uric acid, serum creatinine, hepatic enzyme, cyclosporin (CsA), or tacrolimus (Tac) levels were monitored.

**Results:** 7 patients were studied, 6 males and 1 females. The mean age was 60±6.05 years. At the first visit, after starting febuxostat, median duration was 1.18 weeks (Range, 0.18-3 weeks). Uric acid levels (mg/ml) were lowered from 8.6±1.74 to 4.6±0.64 (p=0.018) and the other laboratory changes were not significant. The serum uric acid level under 6.0 mg/dl was achieved in all subjects (n=7) at first visit. Five of them were maintained the serum uric acid level under 6.0 mg/dl during the lastest visit, for 21.57 weeks of median duration (IQR 20.57-21.57 weeks). One has not been visited after the first visit, The other one has high uric acid level before treatment, his uric acid level was 11.2 mg/dl at baseline, 5.5 mg/dl after 2 weeks and 6.5 mg/dl after 11weeks. Febuxostat was well tolerated during the entire follow-up (Mean 20.57±8.75 weeks, Range, 0.81-21.71 weeks) without any significant abnormality in lab profiles and side effects. Acute gout flares were reported in one patient.

**Conclusion:** Low doses of febuxostat may effectively and promptly reduction of serum UA at a therapeutic target level for hyperuricemia in renal recipients without significant side effect during follow-up. Febuxostat was a safe and effective therapy for treatment of hyperuricemia in renal transplant recipients in short term.

**Key Words:** 신장이식, 고요산혈증, Febuxostat

Kidney transplant, Hyperuricemia, Febuxostat