

신이식후 tacrolimus에 의한 심실 빈맥 1예

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A Case of Tacrolimus-Induced Ventricular Arrhythmia After Kidney Transplantation

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In a 53-year-old women undergoing kidney transplantation, we observed various arrhythmic phenomena including atrial premature beats and supraventricular tachycardia (SVT), which we believe were the effect of tacrolimus. The patients had been suffering from end stage renal disease under hemodialysis. After the operation methylprednisolone, mycophenolate mofetil and tacrolimus were administered; The tacrolimus dose was increased from 3 mg twice a day. The tacrolimus concentration gradually increased, and sporadic atrial premature beats were detected on postoperative day (POD) 2. The tacrolimus blood concentration had risen to 10.6 ng/mL. On POD 3 the incidence increased significantly, accompanied by the appearance of SVT and sporadic ventricular premature beats (Fig. 1). SVT was controlled with amiodarone and beta blocker. The tacrolimus dose was decreased and the blood concentration maintained at around 8 ng/ml, at which level near-fatal arrhythmia did not recur. In the case that we are reporting the data do not show a good correlation between QTc and tacrolimus concentration. SVT has never before been reported as an adverse effect of tacrolimus. SVT was successfully treated with amiodarone and beta blocker.

Tacrolimus, a potent immunosuppressive drug often administered to transplant recipients, exhibits a variety of adverse cardiovascular effects. Common symptoms are chest pain and hypertension, and abnormal electrocardiographic findings have also been reported. Albeit with a low incidence, the adverse effects are occasionally life-threatening.

After kidney transplantation, In a 53-year-old women developed a various arrhythmia. Because the arrhythmia associated with tacrolimus may be life-threatening, patients should be monitored carefully when any type of arrhythmia develops.

Key Words: 타크로리무스, 부정맥, 신장이식

Tacrolimus, Arrhythmia, Kidney transplantation

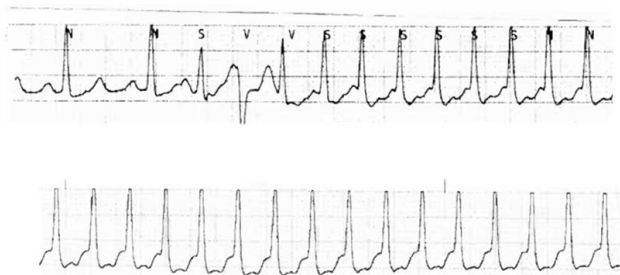


Figure 1. Record of ECG and arterial pressure tracings on the monitor. Ventricular premature beats was detected on the record (*upper trace*). Several minutes later supraventricular tachycardia developed (*lower trace*). Blood pressure decreased when supraventricular tachycardia occurred. Short runs are also evident