

◇ Therapeutic potential of PAF antagonist in the treatment of myocardial infarction

임승평, Seung-Pyung Lim, M.D., Eric B. Loucks, BSc., Karim A. Qayumi, M.D.

Dept. of Cardiothoracic Surgery, Chungnam National University University of British Columbia, Vancouver, Canada

배경 및 목적 : Current treatments for myocardial infarction that initiate reperfusion of the ischemic myocardium with oxygenated blood are beneficial but cause cardiovascular dysfunctions and increase the risk of mortality during the early reperfusion period. Antagonist of the inflammatory mediator (PAF) have been shown to reduce cardiovascular dysfunctions during the reperfusion period when administered prior to myocardial infarction. Objective is to investigate the protective effects of a specific PAF receptor antagonist TCV-309 on cardiovascular function when administered at a clinically relevant 45 min after onset of ischemia in a swine model.

방법 : Seventeen female domestic swine (25-30kg) were randomly assigned to one of three groups (treated, untreated, sham) Treated (n=7) and untreated (n=7) groups were both subjected to 60 minutes of regional ischemia by ligation of distal LAD coronary artery, followed by 8 days of reperfusion

결과 : In the group treated with TCV-309, six of seven animals survived to eight days post-ischemia. The one death occurred during the postoperative period. Comparatively, two of seven animals in the untreated groups survived to eight days post-ischemia. Two animals in this group died at 45 minutes ischemia, one died at 15 minutes reperfusion and two died postoperatively.

결론 : A single dose of PAF antagonist, TCV-309 protects against dysrhythmias, hemodynamic instability and myocardial depression in the time period immediately following onset of reperfusion. Introduction of a PAF antagonist in the clinical management of myocardial infarction may improve cardiovascular function and reduce mortality, particularly within the first 24 hours after the onset of reperfusion.

책임저자: 임승평 (충남대학교) 발표자: 임승평 (충남대학교)