

## ◇Strategies for Myocardial Protection for Surgical Correction of Chronic Cyanotic Heart Disease

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배경 및 목적 : cyanotic congenital hearts have an increased susceptibility to ischemia and subsequent reperfusion. The role of platelet-activating factor antagonist and mechanical neutrophil depletion with leukocyte depleting filter for control of ischemia-reperfusion injury was evaluated in corrective surgery for cyanotic heart disease.

방법 : A swine model of cyanotic heart disease was evaluated with three study groups : 1)control, 2)platelet activating factor(PAF) antagonist, 3)leukocyte depleting filter (LDF).A cyanotic heart model was created in weanling swine with LA appendage to PA fistula with peripheral banding. The experimental procedure was performed after 5-7 weeks with body weight over 20kg and oxygen saturation 85% or less.

결과 : There were four deaths in the control group within 30 minutes post-CPB while all animals in the treated groups survived over 60 minutes. Dopamine was required in the control group to a greater extent than the PAF antagonist and LDF groups. The ventricular assessment, end-systolic elastance (E-max) revealed superior performance in the LDF group at 10 and 30 minutes post-CPB compared to the control group.

결론 : The leukocyte depleting filters and PAF antagonist both provided myocardial protection while LDF provided superior myocardial contractility.

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