

European Respiratory Society Annual Congress 2012

Abstract Number: 219

Publication Number: P1993

Abstract Group: 2.1. Acute Critical Care

Keyword 1: Intensive care **Keyword 2:** Acute respiratory failure **Keyword 3:** ARDS (Acute Respiratory Distress Syndrome)

Title: Impact of experience and education in treatment of adult respiratory distress syndrome (ARDS) using extracorporeal membrane oxygenation (ECMO)

Dr. Go Woon 427 Kim taria@nate.com MD ¹, Prof. Dr Sang Bum 428 Hong sbhong@amc.seoul.kr MD ¹, Prof. Dr Yoounsuck 429 Koh yskoh@amc.seoul.kr MD ¹, Prof. Dr Chae Man 430 Lim cmлим@amc.seoul.kr MD ¹ and Prof. Dr Jin Won 431 Huh jwhuh@amc.seoul.kr MD ¹. ¹ Pulmonology and Critical Care Medicine, Asan Medical Center, Seoul, Korea .

Body: Background: Extracorporeal membrane oxygenation (ECMO) is a form of long-term cardiopulmonary bypass and recently have been used to treat adults with respiratory or cardiac failure despite maximal medical therapy. ECMO is a high risk procedure with 25% of mortality rate. The previous a few studies showed that improving equipment and increased experience to manage ECMO are important to patient survival and improving results. ECMO training program is important in solving significant, life-threatening problems that can occur during ECMO application. Our aims in this study are to show our experience of ECMO management and reduction in mortality rate according to an accumulation of experience and knowledge. Methods: A nonrandomized retrospective study was performed. Results: In 2009-2011, ECMO was applied to 82 patients. Veno-venous and veno-arterial ECMO was 63.4% and 36.6%, respectively. ECMO was applied to 47 patients in 2009~2010 and 35 patients in 2011. The most common cause of ECMO application was pulmonary problem. The most common complication of ECMO was bleeding and the most common cause of death was pneumonia. 41.5% of patients was weaned off the ECMO. Intensive care unit mortality was higher on 2009~2010 than on 2011 (89.4% vs 57.1%, OR 6.3, CI 2.008-19.771, $p<0.001$). Hospital mortality was higher on 2009~2010 than on 2011 (89.4% vs 57.1%, OR 6.3, CI 2.008-19.771, $p<0.001$) and 28-day mortality was higher on 2009~2010 than on 2011 (72.3% vs 45.7%, OR 3.106, CI 1.235-7.812, $p<0.014$). Conclusion: According to an accumulation of experience and knowledge, mortality was reduced in 2011 compared to 2009-2010.