



Congenital Cardiology Solutions

PROFOUND CYTOKINE REMOVAL WITH ULTRAFILTRATION AND MODIFIED ULTRAFILTRATION IN PATIENTS UNDERGOING SURGICAL REPAIR OF CONGENITAL HEART DEFECTS

Poster Contributions

Poster Sessions, Expo North

Saturday, March 09, 2013, 10:00 a.m.-10:45 a.m.

Session Title: Congenital Cardiology Solutions: Congenital Surgical Therapies

Abstract Category: 14. Congenital Cardiology Solutions: Therapy

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Background: During cardiopulmonary bypass (CPB) methods to mitigate inflammation are important. Ultrafiltration (UF) and modified UF (MUF) are routinely used during CPB.

Methods: The effluent from UF and MUF, from 41 patients undergoing repair of congenital heart defects on CPB, was evaluate for cytokines. ANOVA analysis was performed $p < 0.05$ was significant.

Results: Median age (years) 1.72 ± 4.56 , mean weight (Kg) 29.7 ± 6.2 kg. 44% had redo sternotomy, mean surgical time of $4:38 \pm 1:35$ hours and a comprehensive complexity score of 3.8 ± 1.1 . Of the patients 51.2% received blood in the operating room.

Conclusions: UF and MUF are effective at reducing cytokines during CPB. MUF seems very important not only for hemo-concentration but also at reducing the cytokine load, and seems important at reducing IL-6 levels.

