

Haemodynamic changes during haemofiltration in meningococcal septicemia

P Maheshwari [1], R Chhabra [1], M Clement [1], M Salama [1], C DeMunter [1]

[1]St Mary's hospital, London, United Kingdom

[2]St Mary's hospital, London, United Kingdom

[3]St Mary's hospital, London, United Kingdom

[4]St Mary's hospital, London, United Kingdom

[5]St Mary's hospital, London, United Kingdom

Objective: To review the cardiovascular effects of veno-venous hemofiltration in severe meningococcal septic shock. **Methods:** Retrospective notes were reviewed of patients with severe meningococcal sepsis who were hemofiltered in our paediatric intensive care unit. Parameters including inotropic requirement, metabolic acidosis, fluid requirement and blood lactate were recorded 12 hours before starting hemofiltration, at the time of starting, 6, 12, 24 & 48 hours after initiating hemofiltration which was used at flows of 80 to 120ml/kg/hr, depending on hemodynamic stability. **Results:** 27 patients from 6 months to 16 years of age (median 5.5 years) with increasing fluid and inotropic requirements, anuria, worsening lactic acidemia and base deficits were hemofiltered within 48 hours of admission. 3 patients died of fulminant shock within 4 hours of initiating hemofiltration, therefore, not included in the study. The mean PRISM score among the 24 survivors was 64.7(3.4, Åi 96). At the initiation of hemofiltration, patients were on a mean adrenalin infusion of 2.35mcg/kg/min and noradrenalin infusion of 0.95 mcg/kg/min. There was a significant improvement in cardiovascular status after a mean of 6 hours of initiation of hemofiltration. Base deficit improved, blood lactic acid levels and doses of adrenaline and noradrenalin all rapidly reduced significantly. **Conclusion:** Hemofiltration in severe meningococcal septicaemia was associated with rapid improvement in cardiovascular status.

Corresponding author:

R Chhabra

St Mary's Hospital, London, PICU

7th Floor, QEQM Building

Praed Street

London

W2 1NY

W2 1NY London

London, United Kingdom

rajanubha2000@gmail.com

Phone: 0044208 4066 804

Mobile: 0044 7817 391 667

Fax: 0044 7886 6958