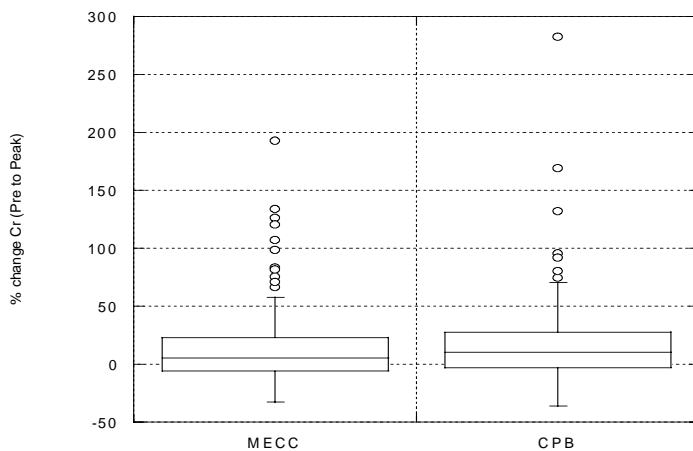


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 Abstracttitel: DOES STRICT NORMOVOLAEMIC CARDIOPULMONARY BYPASS AS PART OF A BLOOD CONSERVATION STRATEGY IN CARDIAC SURGERY AFFECT POSTOPERATIVE RENAL FUNCTION?

Miniaturised Extracorporeal Circulation (MECC) for Cardiopulmonary Bypass (CPB) is a rapidly evolving practise to minimise the intraoperative haemodilution and to reduce the nadir of CPB haemoglobin. Observation of results in both our centre, and reported independently by others suggests that patients are relatively hypovolaemic after using this method of CPB, but with an increased systemic vascular resistance. We have addressed the concern that this may in turn lead to a detrimental effect on postoperative renal function.

We analysed the change in perioperative creatinine level in our first 100 MECC cases with normal renal function. We compared these with 83 historical controls (same surgeon prior to the introduction of MECC). % change in Cr from preoperative values are shown.



Mean change in creatinine from preoperative to peak value were the same between groups (MECC $16.8\mu\text{mol l}^{-1}\pm 37.4$, CPB $20.2\mu\text{mol l}^{-1}\pm 43.9$) but with wide inter-individual variation.

These data do not support the hypothesis that relative hypovolaemia after MECC has an adverse effect on immediate renal function after heart surgery.