

The risk associated with antifibrinolytic treatment in patients undergoing CABG.

Adam Szafranek, P.Olszowka, MM. Yusuf, P. O'Keefe, D. Mehta. Cardiff, UK

Recently, use of aprotinin in patients undergoing CABG has been identified as an independent risk factor associated with renal failure and in "primary" procedures (elective patients with good LV, not redo) with mortality, CVA and MI. We would like to present our experience with perioperative antifibrinolytic treatment.

From 1998 to 2006 3945 patients underwent CABG in our centre. 3348 patients underwent "primary" CABG (84%)
978 of them received aminocaproic acid or tranexamic acid (24%) and 603 patients receive aprotinin perioperatively (15%)

30-day and late mortality was 1.8% (n=78) and 7.5% (n=298) respectively.

Multilogistic regression analyses of the group showed that: older age, female sex, cardiac failure ($p < 0.01$), COPD, CRF, poor LV, redo and emergency type of operation ($p < 0.03$) were the independent mortality risk factors. There was no statistical correlation between CVA, ARF, MI, mortality and use of aprotinin, aminocaproic acid nor tranexamic acid. However in the group of patients with "primary" CABG use of aprotinin was associated with the higher postoperative dialysis rate ($p < 0.05$) There was no such an association with aminocaproic acid nor tranexamic acid.

Our analysis confirms a relationship between aprotinin and postoperative renal failure. We believe that a limited trust and caution should be used when new methods of treatment are introduced without sufficient scientific background. Further investigation is needed to confirm benefits and side effects of antifibrinolytic treatment in patients undergoing cardiac surgery.