

MEETING ABSTRACT

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Does Ethnicity Impact Outcome Following Cardiac Surgery?

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Background/Introduction

Impact of ethnicity on outcome following cardiac surgery is controversial. Current risk stratification models do not include ethnicity as risk factor.

Aims/Objectives

To assess impact of ethnicity (South-East Asian versus Caucasian) on outcome following cardiac surgery

Method

Patients of Asian ethnicity who underwent cardiac surgery at our unit between Sep 2005 to Dec 2013 were included in the study (n = 855). This group was matched 1:2 with Caucasian patients (n = 1710).

Results

Pre-operative characteristics confirmed that patients of Asian ethnicity were more likely to be younger [Mean Age 61.7 (SD 11.3) v/s 63.2 (SD 10.4) years, p = 0.006], females (23% v/s 19%, p = 0.03) with lower BMI (27 vs 29, p < 0.01) as compared to Caucasian population. Asian ethnicity was strongly associated with higher prevalence of diabetes (51% v/s 22%, p = 0.01), non-smokers (69% v/s 30%, p = < 0.01) and need for urgent surgery (42% v/s 29%, p < 0.01). Post operatively patients with Asian Ethnicity had a higher re-exploration rate (7.4% v/s 5.4%, p < 0.04), higher rate of readmission to ITU (2.9% v/s 2.6%, p = 0.04), a greater need for blood and blood products transfusion requirement (Blood Units 1.23 v/s 0.76, p < 0.01) and was also associated with a higher in-hospital mortality (2.8% v/s 1.5%, p = 0.02). Caucasians had a significantly higher prevalence of post op AF (26% v/s 17%, p < 0.01) but shorter ITU (median 1.0 (0,90) days v/s.

1.5 (0,183) days, p < 0.01) and in-hospital stay (median 5 (1,184) days v/s. 6 (3,183), p < 0.01).

Discussion/Conclusion

Asian ethnicity has an adverse impact on outcome following cardiac surgery, in a matched population. If confirmed in large randomised studies, ethnicity should be made part of future risk stratification models.

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