OBJECTIVE

The evaluation of the quality of care delivered to patients with the congenital heart diseases relies heavily on the analysis of outcomes. The EACTS database was created to assess the outcomes of congenital cardiac surgery, enable comparison of results, definition of risk factors and targeting research activities. By employing the widely used and accepted methodologies of case mix complexity adjustment in congenital cardiac surgery, we tried to evaluate our performance, and to use the ABC scores for a case complexity selection that may have different outcomes in various centres.

METHODS

In this report, we analysed outcomes of cardiac surgical procedures performed in our institution between January 2008 and December 2011. Data were collected in the EACTS database and represent surgical procedures performed with or without cardiopulmonary bypass. This section contains information on patient, early mortality, occurrence of postoperative complications, and procedural complexity presented by ABC scores. Together with prospective collection of these data, all patients sent for operation in foreign cardiosurgical centers were recorded.

RESULTS

During the period of study, 634 operations were done, among them 60% were performed in Croatia, 40% in foreign cardiosurgical centers. The number of operations performed in Croatia showed linear increase: 55 operation, 78, 121 and 126 operations performed in a year 2008, 2009, 2010, 2011 respectively. Early mortality was 1.82%, 5.41%, 3.64%, 3.48% in 2008, 2009, 2010, 2011 respectively. Increase in number of operation was followed with satisfactory low average mortality of 3.85%. The mean complexity, according to the risk adjustment methodology for cardiac procedures performed in Croatia is 5.77, with no statistically important changes during years of study. When analysing the procedures performed in our country, assigned by higher ABC score, we determined statistically significant connection between ABC score and mortality rate.

CONCLUSION

The use of standardised risk scores allows selection of complex cardiac diseases which may have very different outcomes in various centres. In our case, those with higher ABC scores were correctly identified and referred for treatment abroad. In this way, we allowed gradual progress of cardiosurgical model in our country and maintain an enviable low mortality.