

Increasing amiodarone use in cardiopulmonary resuscitation.

To examine practice patterns of amiodarone during in-hospital cardiac arrest, National Registry of Cardiopulmonary Resuscitation (NRCPR) investigators studied the changing pattern of use over time following the inclusion of amiodarone for treatment of ventricular fibrillation/pulseless ventricular tachycardia (VF/pVT) in the American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiac Care in 2000. Between January 1, 2000 and July 31, 2005 there were 29,552 VT/pVT events reported to NRCPR, 98.1% involving adults and 1.9% involving children.

Overall, 14854 of 28,999 (51%) of adults with VF/pVT received an antiarrhythmic drug during the course of their resuscitation event. Of these, 8,833 (60%) received amiodarone. Among children with VF/pVT 270/553 (49%) received an antiarrhythmic drug during the course of their resuscitation attempt. Of these, 108 children (40%) received amiodarone.

Adults were more likely than children to receive amiodarone (60% vs. 40%, $p < .001$), and more adults received amiodarone only. Of those adults who received amiodarone, 35% also received lidocaine, while 67% of children who received amiodarone received lidocaine ($p = .001$).

From Jan 2000 to July 2005 the use of amiodarone increased from 233 of 919 patients (25%) in 2000 to 1,207 of 1,674 patients (72%) in 2005 (controlling for potential confounding factors, odds ratio 1.42; 95% confidence interval 1.38-1.46 for each passing year). Moreover, during the same time period the use of amiodarone as the only antiarrhythmic drug also increased

How can NRCPR participants use this data for process improvement in their facilities?

Additional studies are needed to evaluate the use of amiodarone. Facilities should continue to review the use of amiodarone during cardiopulmonary resuscitation within their facility and use this study as an additional resource in training opportunities.

Increasing amiodarone use in cardiopulmonary resuscitation: An analysis of the National Registry of Cardiopulmonary Resuscitation. October TW, Schlein CS, Berg RA, Nadkarni VM, Morris MC and the National Registry of Cardiopulmonary Resuscitation. Critical Care Medicine 2008; 36:126-130