Postoperative junctional ectopic tachycardia in paediatric patients

Gebauer R.(1), Weidenbach M.(1), Kostelka M.(2), Paech C.(1)
Heart Center, University of Leipzig, Dept. of Pediatric Cardiology (1), Dept. of Cardiac Surgery (2), Leipzig, Germany

Junctional ectopic tachycardia (JET) is a serious postoperative complication with a mortality rate up to 14% in patients after heart surgery. In this study we evaluated the incidence, risk factors and outcome of junctional tachycardia. Methods: We analysed retrospectively the data from 1345 patients who underwent open cardiac surgery in our institution from 2006 to 2010. Results: The incidence of junctional ectopic tachycardia was 2,5%. The patients with JET were significantly younger (median 0,25 vs 1,04 years; p=0,001). They had also a longer cardiopulmonary bypass time (median 117,5 vs 91 minutes; p=0,001). Complete atrioventricular block (CAVB) after surgery was diagnosed in 33 patients, 19 of them developed postoperatively also a junctional ectopic tachycardia. In all of the patients with a combination of CAVB and JET recovered the AV conduction in the postoperative course spontaneously. Conclusions: The incidence of junctional ectopic tachycardia was in our cohort low (2,5%). The patients with JET were younger and had a longer cardiopulmonary bypass time.