ANESTHETIC MANAGEMENT OF AN ADULT PATIENT WITH CYANOTIC CONGENITAL HEART DISEASE PRESENTING FOR MAJOR ABDOMINAL SURGERY: A CASE REPORT

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Argomento: Caso clinico

Introduction: Congenitally corrected transposition of great arteries (CCTGA) accounts for only 0.5-1% of all heart defects. CCTGA is a disease where the aorta arises from the morphological right ventricle (RV) and the pulmonary artery from the morphological left ventricle(LV). Mixing of blood in the situation of completely separated pulmonary and systemic circulation is dependent on the existence of intracardiac shunts.

Case summary: A 42-year male was referred from the cardiology unit diagnosed with intrahepatic bile stones after several episodes of cholangitis. His history was remarkable for the existence of CCTGA unrepaired during childhood with a huge VSD, ASD, infundibular pulmonary stenosis, and severe stenosis of the left branch of pulmonary artery. At the age of 38, he underwent a paliative procedure with the creation of a venous aorto-pulmonary shunt which had to be stented a year later due to stenosis. He was on dual antiplatelet therapy. On admission, he was cyanotic (PaO₂ 41 mmHg, SpO₂ 76%), with hemoglobin of 207g/l. The surgical team scheduled the patient for cholecystectomy and hepatico-jejunostomy. After an adequate preparation, anethestic management included antibiotic prophylaxis, intraoperative warming, avoidance of all factors that increase pulmonary vascular resistance, oxygenation, maintaining the systemic vascular resistance to minimize shunting, and administration of iv fluids via air-filtered tubings to avoid paradoxic embolisation. Beside standard monitoring, we used CardioQ. The 7-hour operation was complicated with severe bleeding resulting in autologous transfusion of 6 I of blood and 28 units of cryoprecipitate. The patient remained hemodynamically stabile and well oxygenated. Two hours after the operation, an urgent reoperation was undertaken due to bleeding. During surgical hemostasis, several episodes of hypoxia occurred when hemoglobin level fell under 150g/l and after vasopressor was started. Allogenous transfusion was administered. Patient was extubated 12 hours after the reoperation, and was discharged from hospital after 10 days.